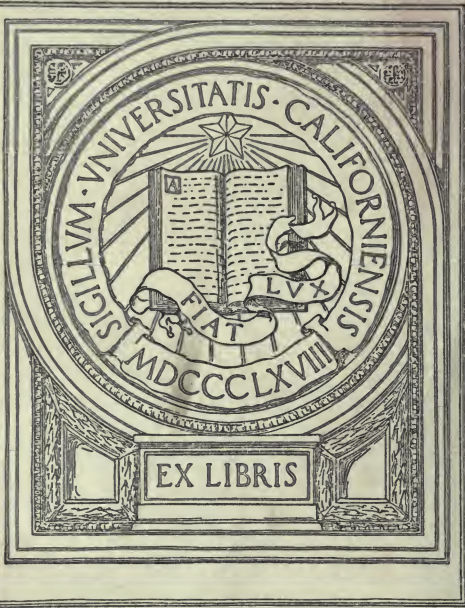




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THE MENTALLY DEFECTIVE CHILD



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THE MENTALLY DEFECTIVE CHILD

WRITTEN SPECIALLY FOR SCHOOL TEACHERS
AND OTHERS INTERESTED IN THE EDUCA-
TIONAL TREATMENT AND AFTER-CARE OF
MENTALLY DEFECTIVE SCHOOL CHILDREN

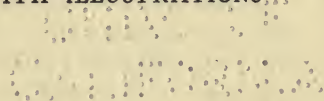
BY

MEREDITH YOUNG, M.D., D.P.H., D.S.Sc.

OF LINCOLN'S INN, BARRISTER-AT-LAW

CHIEF SCHOOL MEDICAL OFFICER, CHESHIRE EDUCATION COMMITTEE;
LECTURER ON SCHOOL HYGIENE, VICTORIA UNIVERSITY OF MAN-
CHESTER; CERTIFYING MEDICAL OFFICER TO THE LOCAL AUTHORITY
(MENTAL DEFICIENCY ACT) FOR THE COUNTY OF CHESHIRE; ETC.

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PREFACE

THE question of mental deficiency, particularly as it affects school children, has quite recently assumed considerable importance. Members of Education Committees, Directors of Education, School Medical Officers, School Teachers, Members of Care or After-Care Committees, Members and Officers of Local Authorities formed under the provisions of the Mental Deficiency Act, 1913, and many others find themselves called upon to assist in discovering these sometimes difficult cases, and in devising means for their training, care and control.

Though there are many excellent books written for the medical profession—from many of which indeed I have freely quoted in these pages—I do not know of any which have been specially written for the layman. The Central Association for the Care of the Mentally Defective recently inaugurated a highly successful Special Summer Course of training on this subject for School Teachers at Birmingham and, as part of this course, I was invited to give a series of short lectures on the medical aspect of the subject. The keen interest manifested by the teachers who attended this course, coupled with evidences of similar interest on the part of the large number of teachers in the County of Cheshire experienced almost daily by me, has led me to write

out at length and to considerably amplify the notes of the lectures I had the privilege of delivering last year at Birmingham.

I desire to acknowledge in the fullest manner the assistance I have derived from the perusal of the works of such authors as Dr. Tredgold (*Mental Deficiency*), Drs. Shuttleworth and Potts (*Mentally Deficient Children*), Dr. C. P. Lapage (*Feeble-Mindedness in Children of School Age*), Dr. Tanzi (*Text Book of Mental Diseases*), Dr. Clouston (*The Hygiene of the Mind*), and Drs. Binet and Simon (*Mentally Defective Children*—translation by Dr. W. B. Drummond).

I hope that—to use the words of the celebrated Sir Francis Galton—this book may be of assistance in promoting “the study of agencies under social control that may improve or impair the racial qualities of future generations either physically or mentally.”

MEREDITH YOUNG.

CHESTER,
May 1916.

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THE MENTALLY DEFECTIVE CHILD

CHAPTER I

THE EXAMINATION OF THE CHILD

Numerical Incidence.—It is interesting to know to what extent mental deficiency prevails amongst school children. The investigators appointed by the recent Royal Commission showed that 0·73 per cent. of the children attending Public Elementary Schools in England and Wales were mentally defective. This means that close upon 50,000 mentally defective children of school age are to be found in England and Wales. In my own county of Cheshire, with a school population of about 70,000, I have definite medical records, so far, of about 350 mentally defective school children—*i.e.* about 0·5 per cent.—but on closer inquiry I have no doubt that this figure will increase. The percentage is usually higher in large towns than in agricultural areas, though this is by no means a universal rule. For instance, the 1904 Royal Commission found 1·2 per cent. in Manchester, 1·03 in Birmingham, 1·85 in Dublin, but only 0·3 in Hull and 0·5 in Belfast, whilst in the agricultural districts of Lincolnshire and Galway the figures were 0·96 and 1·33 per cent. respectively.

The Basis of the Problem.—The teacher who hopes to recognise mental abnormality in the sense of mental defect must come to the subject with a knowledge of the literally innumerable variations in mental expression, as exemplified in eccentricity, obsession, stupidity, lethargy, impulse, perversions of feelings, obstinacies, laziness or inertness, undue liveliness, and many other ordinary abnormalities of mentality. In the mentally normal child these may be present and yet excite no suspicion of mental deficiency or abnormality. There are degrees even in normal mentality, for all of us know many persons of normal intellect who are, may I say by way of example, so lacking or unbalanced or infirm in reasoning power that such things as “faith-healing” amply satisfy their credulity, at all events for a time.

The brain and the stomach are so far comparable that we may assert that no man can have a sound intellect unless he possesses a whole and sound brain, any more than he can have a sound digestion with a diseased or enfeebled stomach. It is on such reasoning that we find, in the case of the mentally defective, that a brain with some of its convolutions undeveloped by reason of the pressure of early inflammatory products, by the impossibility of expansion and growth caused by a too early union of the constituent bones of the cranium or brain-case, or by the too great development of what we call the ventricles (or “water-ways”) of the brain, or by an inherent warping of the power of growth planted in the germ-plasm from which the body develops, cannot grow on normal lines and, as a result, we have some degree of mental defect or mental abnormality present. There is an old axiom, “No brain—no mind,” which seems to some too materialistic a view to take, but which, nevertheless, is the doctrine to which I ask you to subscribe and that with all confidence. I want

you to put from you all metaphysical considerations in this connection and to disregard such things as the entity of the mind and soul. In the place of these I want you to regard the brain as an organ, like the liver or the stomach or, better still, like the voluntary muscles which last can, by suitable tests, be discovered to be deficient in action or imperfect in growth, and by proper training and exercises can be developed, strengthened, protected from deterioration and rendered more stable in action.

Though the brain contains the controlling centres of all our voluntary actions the fact has to be remembered that the brain can be, to some extent, controlled and developed by what may be termed reflex or inverse influences. For example, though certain areas in the brain control the movements of the body to such an extent that when these brain centres are damaged (as in cases of paralysis), movement of the muscles concerned is rendered more or less impossible, the muscles connected with them can be so trained by exercise that they can, by a reflex process, to some extent excite the renewed growth of the brain areas to which they are coupled up. Put briefly it amounts to this—that, though the development of the brain can control the development of the body, the development of the body can, inversely, control to some extent the development of the brain.

The natural order in which the various functions of the brain are developed, though fairly definitely ascertained, depends to a considerable extent on environment. "Speech, sensitiveness, conscience, sex feelings, the religious instincts, may all appear either too soon or too late in a child where the brain is abnormal and the heredity is not good." (Clouston, *Hygiene of Mind*.) Where these functions are developed out of due order

the relations of the affected person, both to his own organism and to the community at large, are bound to suffer, for at once we enter on a conflict with the laws of nature. Specialised education is the only hope of such a victory as will at least leave the affected child in a position enabling it to pass through the world without being *patently* branded with the stigma of mental deficiency.

The main object of my lectures is to stimulate proper and intelligent inquiry so that cases of mental deficiency may be detected at as early an age as possible and so that such cases may be quickly made the subject of adequately organised effort for their improvement. In all problems such as this, when the glimmering of a solution has been obtained, the first stage of progress may be entered up as done. The first step in the amelioration of this national evil is to learn how to discriminate the mentally fit from the mentally deficient.

The Examination of the Child.—In the examination of a child suspected of being mentally deficient there are one or two preliminary considerations to be looked at. It is not fair to make an attempt to assess the intelligence of a child unless he is placed under conditions which do not render the examination an ordeal for him. A child of normal intellect but of a shy nature will not always unpack the knowledge he really possesses, if brought to unaccustomed surroundings and confronted with a strange person and unusual apparatus. Confidence can best be established and maintained by allowing the child to be taken into a room with which he is fairly familiar (best of all if he can be examined in his own home), with his mother present or a teacher who knows him and who is sympathetically inclined towards him. On the table there should be a few simple toys (bricks, dolls, animals, coloured marbles, tops, etc.),

a child's picture book, pencil and paper of the kind the child is used to, an elementary picture puzzle or "jig-saw" consisting of a few fairly large and easily fitted pieces, etc. When the child first comes into the room just give him "good-day," ask him his name (*and remember this*), and then leave him alone for a few minutes to play with the assortment on the table, if he so wishes, whilst you get the history of the case. In connection with the history the following points are important :

Beginning with the medical history, evidence should be taken of mental deficiency of any degree in the father, mother, father's father and mother, mother's father and mother, father's brothers and sisters, mother's brothers and sisters, and child's brothers and sisters. Insanity and epilepsy should be included under this heading. Evidence should then be taken as to tuberculosis in the members of the family tree mentioned above, but beware of accepting vague descriptions of "chronic winter cough," "decline," "consumption of the bowels," etc. The existence of tuberculosis is not, of course, important in the diagnosis of the mental defect, but it is of great interest, as it is often a feature in the history of mental deficiency cases.

Evidences of alcoholism and syphilis are also of importance in aiding both the diagnosis and prognosis, but are most difficult to obtain with any degree of accuracy. In inquiring about epilepsy an endeavour should be made to exclude "fits" which were not true epilepsy—*e.g.* fits which occurred only on the occasion of the onset of acute infectious diseases, fits which only occurred during teething, fits, or so-called fits, occasioned by colic, intestinal worms, severe fright, and so on. Convulsions due to brain injury (what we term Jacksonian epilepsy), or to meningitis (inflammation of the delicate coverings

of the brain), if they have been of frequent occurrence, are of considerable importance both for diagnostic and prognostic purposes. Evidence of consanguineous marriages is of some importance.

The history of the mother during pregnancy is sometimes of value—physical and mental illnesses, special mental strain, shock or fright and lack of proper nutrition are all of importance, as will readily be understood.

The personal history of the child itself can then be carefully recorded, and this should start right back at birth—protracted labour and instrumental interference being the factors of greatest importance here. Then, after reviewing illnesses and accidents (and applying liberal discount to the many magnifications in which this will give most parents a chance to indulge), we proceed to certain pointed questions to which as definite answers as possible should be obtained.

The age at which the child began to sit up is of importance. An ordinary child should sit up at the age of 9 months: delay beyond this may be due to defective muscular development, which, as you know, is frequently occasioned by defective brain development.

The age at which the child began to walk and talk is very important. Normal babies begin to talk and walk between the ages of 9 and 15 months. Feeble-minded children only develop these powers at a later date—usually at a considerably later date—*i.e.* not until they are 2, 3, or even 4 years old. Speech is usually more delayed than walking. Normal babies begin to “babble” at 9 or 10 months of age. One of the very early signs of mental deficiency is the absence of “babbling.”

If reliable evidence can be obtained as to the age at which the child developed control of the bladder and bowels it will have considerable value: in normal

children this is attained during the second year in a properly trained child, but in a mentally defective child it is not attained until very late.

The child's opportunities for education should receive inquiry, for if a child has been the subject of physical illness or of some defect which has interfered with his chances of education—(e.g. excessive shyness or nervousness fostered by natural delicacy of constitution, some defect such as stammering, undetected deafness, etc.)—this must be thrown into the scale in his favour.

Whilst this preliminary inquiry has been going on you will have been casting cautious side-glances at the subject of your inquiry, studying his deportment and his actions and probably gaining some information which will assist you in deciding his degree of intelligence and also in how to make your first approaches direct to him. Now comes the difficult part of the examination, for you now have to extract from the little subject himself the best that he has in him. At first it is best to talk to him about the things he will probably have been handling, and if you see the slightest chance of complimenting him on what he may have done never forget to seize this—it is most important.

As early as possible it is necessary to find out whether sight and hearing are normal or so nearly so as not to affect the tests to be applied. This can be done by showing the child the picture of some well-known object and asking him to name it. Hearing is readily tested, but be on your guard against the stupid child and the child whose attention is constantly wandering, or you may record deafness when it is not really present. In the recognition of colours the child may be improperly assessed because it cannot *name* all the colours shown to it. Colour-blindness is not a very common thing, and can be detected by asking the child to find 'another

article of the same colour as the one incorrectly named by him—*e.g.* if a child says a blue marble is green ask him to find another “green” marble: if it is of normal intellect but colour-blind, it will pick up another blue marble: if it should be feeble-minded it will probably pick up a marble of some other colour. The elementary colours should, of course, be adhered to—it is too much to ask a child to distinguish between “art” shades.

The Facial Expression is well worth studying, for in most cases you will find there is some peculiarity; but let me warn you of one thing, which is quite contrary to popular views, and that is that the best-looking children are generally the worst cases. You will find constant grinning often accompanied by giggling; or a general vacuous look; or a stolid, sulky appearance; or a sort of shrinking look with creasing of the forehead and screwing up of the eyes and mouth; or rolling of the eyes; or constant movements of the eyes, nose, or mouth.

Next you may turn your attention to what have been termed the **stigmata of degeneration**—*i.e.* peculiarities of development, or malformations of certain parts of the body.

The presence of these stigmata is not by any means conclusive evidence of mental defect: they are frequently found in mental defectives but are only more or less accidental accompaniments or surface indications of the defect.

The commonest stigmata are the following:

(a) Occipital region of skull (back of head) presenting an appearance as though it had been shaved off—common in microcephalics. (See later.)

(b) Cranium, or skull, developed in an asymmetrical or irregular fashion and (i) appearing too long from back to front (scapho-cephaly), (ii) forehead and upper part

PLATE I



Ear of defective, showing general blurring and rounding, ridge across hollow between front and back rims, and deficiency of lobule.



Ear of defective, showing Darwinian tubercle at upper and back portion of outer rim, lobule pointing towards cheek, exaggerated fossa or depression in upper part, and exaggerated ridge between this fossa and external opening of ear.



Ear of defective, showing slight tendency to pointing (asinine ear), Darwinian tubercle on upper and back portion of outer rim, and a slightly deficient lobule.

of skull bulging out (hydrocephaly or "water on the brain"), (iii) top part of skull much increased in size as though it had grown too much upwards (oxycephaly or "tower" skull), (iv) skull very small in its greatest circumference and showing a receding forehead and flattening of the occipital region (microcephaly).

(c) Deformities of external ear (see diagram).

(d) Epicanthus, *i.e.* a fold or ridge of skin coming from the upper eyelid down towards a point between the inner angle of the eye and the bridge of the nose.

(e) Nystagmus, or a constant to-and-fro movement of the eyeballs.

(f) Coloboma iridis, or a cleft or slit in the iris or coloured portion of the eye.

(g) Mongolian palpebral fissures, *i.e.* slit-shaped eyelids similar to that seen in the Chinese and Japanese races. (See Fig. I.)

(h) Palate highly arched and V-shaped ("church-roof" palate).

(i) Abnormal nervous action, such as athetosis (slow squirming movement of fingers), twitchings, tremors, grimacing, body-rocking, tongue-sucking, head-nodding, etc.

(j) Hairy mole. On face or body, single, double, or triple vortices or whorls in the hair of the head.

(k) Adenoma sebaceum or pimply eruption confined to the face, the pimples being of a whitish or yellowish colour, waxy in appearance, and varying in size from pin-heads to small peas. The pimples appear chiefly on the side of the nose, but sometimes one finds them on the forehead and chin. As a rule they persist throughout life. They are extremely rare in normal individuals but not uncommon in imbeciles and chronic epileptics.

Speech Defects.—In order to understand speech defects properly we must study the mechanism of speech.

The organs or parts connected with speech production are the controlling centre in the brain (the third left frontal convolution, usually spoken of as "Broca's area" after its discoverer); the receiving apparatus (*i.e.* the ears and eyes); the lungs, which provide the expiration of air necessary for the production of sound; the larynx, or voice box, with its vocal cords, the vibration of which in the rush of expired air produces the actual sounds; the mouth, tongue, lips, and teeth, which come into action for the production of the consonants; and the palate, nose and cavities in the upper jaw-bones, which act as sounding-boxes. In connection with the controlling brain centre, may I ask you again to remember that, though this centre by its activity stimulates the external apparatus connected with it to action, the external apparatus itself can inversely stimulate and cause development of the internal controlling brain centre. Thus, an imperfectly developed or damaged Broca's area can be improved by the practising of lip movements, breathing exercises, the hearing of spoken language, and so on. Intimately connected with Broca's area are what we call the visual or word-seeing centre, the auditory or word-hearing centre, the writing centre, and the centre for the storage of memories of words seen and words heard. All these centres are connected together in the brain by what we term association or inter-communication fibres so that they are able to materially assist each other in the performance of their work. If Broca's area becomes injured, the affected person may recover so far as to be able to understand all that is said to him, but he will be unable to speak unless the effects of the injury can be repaired by Nature. If the writing centre (which is immediately above Broca's area) be injured, the affected person will not be able to write spontaneously, *i.e.* to express his thoughts in

writing, though he may be able to write from a copy. I shall revert to this part of the subject later, in connection with the conditions known as word-blindness and word-deafness.

To return to the special defects of speech. All children learn by imitation: infants express their desires and emotions by gestures and signs until they have learned enough language, by imitation and the development of the centre for the storage of word-memories, to enable them to express these desires and emotions by means of speech. The difficulty of teaching speech to deaf-mutes and to the blind may be here mentioned. The blind child can acquire speech just in the same way as the normal child but the trouble with the deaf child is that "*there are no words to teach him with.*" (W. B. Drummond, *School Hygiene.*) He is entirely without language at the start of his education except that of gestures and signs. The difficulty is thus not his deafness but that, in order to explain words to him, other words foreign to his knowledge must be used. Education is thus compelled to proceed largely along the line of gesture. Fortunately such children are often very observant and good at imitation, so that they are sometimes not suspected of being deaf but only of not possessing the power or gift of speech.

The principal defects of speech found in the mentally defective are lalling, idioglossia, bradylalia, logorrhœa, stammering and stuttering, and echolalia. I propose to deal separately with each of these, and would only preface my remarks with the observation that they are—like the stigmata of degeneration—only concomitant signs, and not absolutely diagnostic signs of mental deficiency.

Stammering and stuttering are frequently confused by Medical Inspectors as well as by laymen. There are three mechanisms in speech to be specially considered

in this connection—the expiratory, which expels the air ; the vocal cords, which are placed in such a position as to reproduce the tone or chord ; and the oral or mouth mechanism needed for the production of consonants. When these are inco-ordinated stammering and stuttering result.

Stammering is due to an intermittent spasm of the respiratory and articulatory muscles in the act of speech, or to an inco-ordination between the two sets of muscles, it has also been defined as a “ spasmodic arrest of utterance,” the stop usually occurring at one of the physiological stop positions, *i.e.* at B, P, M, in the case of labials, at T, D, Th, in the case of dentals, and so on. The stammerer endeavours to utter articulate sounds without breathing properly.

Stuttering consists of a “ spasmodic repetition of the initial syllables of words ”—g-g-give me a b-book ; it is more common than stammering, and is more easily corrected by respiratory exercises because it is almost entirely caused by improper breathing. Half the battle in the cure of these two complaints is ensuring diaphragmatic breathing as a preliminary, followed at first in bad cases by practice in controlling the exit of the breath, *without the exercise of the lips and tongue* in the pronouncement of sounds ; *e.g.* take a deep breath and then breathe out with short gasps to the beat of the teacher’s finger, making a sound like “ Huh, Huh, Huh.” Later the child’s first attempts at speech, which are always attended by the use of labials such as is shown by words like “ mamma,” “ babba,” etc., are to be imitated. Later still dentals, linguals, gutturals, nasal and vowel sounds may be taught. In every case, intonation or singing will be found helpful : both stammering and stuttering frequently vanish during singing, because proper breathing is more essential

for this than for talking, and the pupil having to keep time with the music, there is not the same tendency to rush the words. In every case it is imperative that slow and deliberate utterance should be practised. It is very harmful for children who are subjects of stammering and stuttering to be made to read, or even, in some cases, to answer questions verbally in a class of ordinary children. They should be submitted to these tests when alone with the teacher.

Idioglossia is merely infant language, the child choosing a way of pronunciation which is the easiest it can find—thus, “ Mammy ’oves ’er ’ickle dirl.”

Lalling, or the substitution of one consonant for another, is a condition frequent in mentally defectives. Y is often substituted for R, *i.e.* Rabbit is often pronounced “ Yabbit,” and Raining is called “ Yaining.” K is often pronounced for T (“ likkle ” for “ little ”) and D for G, as “ Dod ” for “ God.” The condition is practically identical with idioglossia.

Bradylalia is a condition where speech is abnormally slow. **Logorrhoea** is the exact opposite—words being poured out in an almost incessant stream. Both of these conditions are subsidiary indications of a low level of intelligence in children.

Echolalia is a term given to the parrot-like imitation of sounds without any grasp of their real meaning. It is due to a kind of merereflex action between the auditory and speech centres, without the intermediate employment of thought. Thus a child on being asked, “ What is in my hand ? ” will either repeat the whole of the question or some of the last words, *e.g.* “ in my hand,” or “ hand.”

All the defects named, and particularly lalling and echolalia, are commonly found in mental defectives. Echolalia in a child of 5 or 6 years of age usually denotes a fairly low grade of mental defect.

Attention is a faculty which varies enormously in individuals, as you know well. Feeble-minded children possess the power of attention in a very limited degree. Especially is this the case in the consideration of abstract ideas—justice, charity, virtue, beauty, peace, kindness, dignity, repose, etc. In the teaching of defectives the teacher, if he wishes for success, has to strain every effort and utilise his powers of imagination and invention to the utmost in order to keep attention sustained for even a comparatively short time. The less the attention given, the less the impression made on the brain by the stimulus applied, no matter by what path it reaches the brain.

Memory is best tested by giving the child errands to perform, containing two or more items in each. It may also be tested by the recognition of common objects or sounds, and of the ideas associated with these. Another simple way to test a child's memory is to ask it to point out a few objects in a picture, and afterwards to tell it a story with three or four outstanding items in it; then, after the lapse of a few minutes, ask it to tell you about the picture shown a short time ago or the story you told it.

Judgment may be tested by asking the child to compare three or four things of slightly different length, size, weight, etc. A higher form of this test is to ask the child to arrange the test objects in order of length, size, and weight; a still more severe test is to ask it to compare cubes or spheres of the same size but of different weight or to arrange them in order. Simpler tests may be devised such as putting side by side a real and a toy watch for comparison and asking the child which it prefers: the plainer the real watch, and the more ornate the toy, the better the test.

Ideas of Relationship may be tested by asking the

child, *e.g.*, to pick out all the biggest marbles from a mixed series ; to draw two objects almost alike, but with some small feature omitted in the one, and to ask the child whether the two drawings are the same and, if not, what the difference is ; to show him some object and ask what it is used for, what it does, and what he would do with it if it were his, and so on.

General Concepts, *e.g.* possession, self-protection, purpose, response, concentration, will-power, and initiative. I propose to deal with these later, as they are, in my opinion, the best tests to which a child can be put.

Emotional Conditions—excitement, aggression, co-operation, affection, can only be properly assessed by fairly long observation.

Will-Power is fairly easy to gauge, and you will usually find it deficient. In fact, Dr. Lapage describes an extraordinary instance, in which a boy of the Mongolian type was found one day "tying a string round the throat of a much bigger boy, who, though a fairly high-grade case, was making no effort to save himself from what were really serious attempts to strangle him." (*Feeble-mindedness in Children of School Age*.) Lesser degrees of this are exemplified in the children adopting silly suggestions made to them : some defectives of low grade will readily adopt the most obviously absurd suggestions. Herein lies the danger of having different grades of such children under the same roof or in the same class—the medium grade will, sheep-like, follow the example of the low grade and tend to deteriorate.

On the contrary side of this exhibition of will-power, you will find some mentally defective children exceptionally obstinate and difficult to move or persuade.

CHAPTER II

TYPES OF MENTAL DEFICIENCY

THERE are certain types of mentally defective children which are fairly clearly recognisable, and I propose to describe these as far as practicable in non-medical language.

Mongolism.—Here there are three peculiarities which when present *together* render a diagnosis of mongolism almost certain. It is to be noted, however, that these peculiarities may be present *separately* in mentally defective children of other types, and possibly in children who are *not* mentally defective. The skull, the eyes and the tongue are the features to observe in this condition. The head is small and rounded (almost bullet-shaped). The eyes are Chinese in appearance—the eyes set wide apart, and there is a narrow and oblique appearance of the lids—the fissure between the lids sloping upwards and outwards from the nose (Fig. 1). The tongue is often exceptionally large (sometimes protruding from the mouth), and is usually transversely fissured and roughened by the enlargement of the papillæ or little pimples or surface roughenings which one can see towards the back of the tongue. This condition is probably produced by the habit of tongue-sucking. In addition you will find in such cases that the skin of the hands and face is rough, thick, red, and flabby in appearance. Deformities such

as knock-knee and flat-foot are often found in such children. They are very prone to consumption, to pneumonia and to most infectious diseases, and they usually have sores such as chilblains on the hands and feet. They are exceptionally sensitive to cold, as shown by blueness of the extremities, and they show other symptoms of low vitality. They usually die of phthisis before reaching maturity. They are generally very con-



FIG. 1.

tented and happy, and are very fond of music, especially that of the "tom-tom" or "ragtime" variety.

Microcephaly is probably due to a maiming of the brain caused by premature joining together of the bones forming the skull (thus cramping the growth of the brain), or by injury or inflammation preventing the brain from attaining its normal size. The skull measured round at its maximum circumference (*i.e.* about the level of the eyebrows) will be found to be about seventeen inches or less. In addition to this you will

find that the frontal (or forehead) part of the skull and the occipital (or back portion) are, as it were, shaved off and show little development (Fig. 2). The scalp is often furrowed or corrugated and the hair is coarse and wiry. The individual is usually small in stature and many are mere dwarfs. The best of them may be able to earn their own living working under constant supervision. Sustained effort on the part of microcephalics



FIG. 2.

is usually impossible of achievement, though their powers of observation and imitation are often quite good.

Hydrocephalus or "water on the brain" is due to an excessive formation of fluid in what may be termed the internal "waterways" of the brain: the pressure of this forces the bones of the skull outwards and compresses the substance of the brain against the interior of the skull, thus cramping its growth and nu-

trition. In cases of hydrocephalus the excess "water" may be in one or both of two places. It may be in the ventricles or internal "waterways," in which case it distends them and presses the brain substance against the skull. It may be on the outside of the brain substance—between this and the skull—in which case it exerts pressure on the outer surface of the brain substance, where pressure is more dangerous because most of the centres that I have described to you are situated



FIG. 3.

near the surface of the brain. Or it may be both inside the ventricles or internal "waterways" and also between the brain surface and the skull, in which case it is probably most dangerous of all, because it can then exert a double compression on the brain, both from without and from within, and not only press on the centres near the surface but also press on the great nerves of the senses (hearing, seeing, etc.), which come off near the interior of the brain. The forehead is high and bulges outwards, and the head has a top-heavy appear-

ance and tends to be flattened or to sink in at the top (Fig. 3). The skin of the scalp is often marked by prominent bluish veins; the appearance presented is as though the skin has been stretched to such an extent as to thin it out and thus make the veins beneath easily discernible. The face has often a pinched look. If the excessive formation of fluid continues, the pressure on the nerves leaving the brain and on the motor centres will result in blindness, deafness, and partial paralysis of certain parts of the body. The affected children are usually quiet, docile, and affectionate—sometimes for a period (when the fluid pressure is low) they are brilliant. In cases where there are signs of progression of the disease, *i.e.* of an increase of pressure of the fluid, such as squint, nystagmus, deafness, or epileptic seizures, the child should be given a complete rest for some months, otherwise a fatal termination may be accelerated.

Paralytic Forms.—The paralysis occurring in the feeble-minded is merely an additional result of that maiming or destruction of a portion of the brain which has caused the mental defect. The chief cause of this particular type of defect is injury to the blood-vessels of the brain—rupture or blockage occurring at birth or later—which results in the cutting off of the supply of blood to certain important areas of the brain, or effusion (pouring out) of blood into the substance of a part of the brain causing pressure on and damage to nerve cells and nerve fibres. The symptoms may be actual paralysis of certain muscles of one or both sides of the body (arms, legs, and face), with wasting, loss of the power of co-ordination of movement, tremors or exaggerated movement (which sometimes simulates epilepsy or St. Vitus' Dance), contractions of limbs and digits, and possibly disorders of vision and speech.

There is usually a history of convulsions coming on early in infancy, with loss of power in the arm or leg or both in the arm and leg on one side following on rather suddenly. When the paralysis or loss of power begins to pass away and some degree of movement is being recovered, what we call *spastic contractures* are left, *i.e.* contractions of muscles of a cramp-like character lasting for several minutes and sometimes becoming permanent and leading to more or less serious deformity. Then, when the child begins to walk, it will do so in an easily recognisable manner—throwing the affected leg forward with a jerk and dragging the toes along the ground. In severe cases, where very imperfect recovery of movement takes place, and especially where the speech centre is affected, the patient may remain an idiot. In the better class of case, especially if the child has good will-power, which he usually has, he will struggle hard to overcome his disabilities and the result will be good. Much depends on home care in these cases, and medical treatment of the contractions and of wasted or undeveloped muscles, employing massage and electricity, is required. If suitable treatment be persevered in, considerable physical and mental improvement will result.

Cretinism is not a common condition in this country, and is associated with absence, imperfect growth or wasting of the thyroid gland—a small secretory organ situated in front of and at the sides of the lower portion of the windpipe (Fig. 4). The subjects of this disease are stunted in growth almost to dwarfing: the facial expression is stolid owing to the folds and wrinkles of the skin of the face being blotted out by the bagginess and thickness of the substance of the skin: the hands are broad (spade-shaped) and the fingers are stumpy and squarish at the tips; the nose is flattened, the lips

thick and the tongue large and often protruding. The facial expression is immobile and obtuse. In character cretins are placid, torpid, and dull or slow in response, but they are harmless and usually easily led, though capable only of very elementary education. The administration of an artificially prepared extract of the thyroid gland of the sheep, if begun early and continued



FIG. 4.

over a long period, usually effects a marked improvement in bodily growth and appearance and, to a much less extent, in mental standard. There are cases which are termed *cretinoid* where, along with some degree of mental defect, the appearances described are present in a lessened degree.

Epilepsy is a fairly frequent condition in the feeble-minded. It must be carefully distinguished from hysterical fits; and fortunately this is a comparatively easy matter, for the child in an epileptic fit becomes unconscious, always falls down irrespective of time or place, occasionally bites the tongue severely during

the spasm, and the convulsive movements of the body and limbs are quite purposeless. In hysteria, on the other hand, the child does not fall down in such a way as to hurt itself, there is not the complete loss of consciousness seen in true epilepsy (easily tested by pressing your own thumb-nail under the patient's thumb-nail so as to press against the "quick," when the pain will cause the hysterical patient to make efforts to remove his thumb), the child does not bite its tongue, and a sudden shock or surprise (a call of "fire" for example) will put an end to the fit. Children of nervous and excitable dispositions are at times the subject of hysterical fits, and they should be treated firmly but with a certain quantity of sympathy. The best definition I have heard of the causation of hysteria is that it is "not the presence of the will to do wrong but the absence of the will to do right." Everything possible to develop the strength of the child's will should be done, but the child should be made to see that you will "stand no nonsense" from it. Epilepsy does not always manifest itself by convulsive fits: what is known as *petit mal* consists in slight temporary loss of consciousness, with perhaps the making of curious noises in the throat along with some nervous twitchings of the hands and face.

If a child is the subject of epilepsy and is also feeble-minded the outlook is not very good: severe or frequent fits which cannot be controlled by medical treatment mean that the mental condition will get gradually worse; in the case of fits which are capable of being controlled by medical treatment the affected child will be put on the same level as other feeble-minded children. Cases of epilepsy unattended by feeble-mindedness can usually be cured, and though the child may be a little backward for a time no permanent effect on the brain will be noticeable.

Epilepsy and feeble-mindedness existing in the same subject are not related to each other as cause and effect: both are due to congenital and different causes. Convulsive fits caused by *meningitis* (inflammation of the covering membrane of the brain) are not the same thing as epilepsy. Meningitis, often of a slow and progressive character, is a cause of feeble-mindedness owing to the destruction of brain cells and communicating fibres as well as of sense organs such as the ear and eye; it is not, however, such a common cause of mental defect as is popularly supposed. Conversely the brains of feeble-minded children are peculiarly prone to attacks of meningitis. Meningitis follows such diseases as tuberculosis, syphilis, scarlet fever, ear-disease, etc., but it sometimes develops within the womb. The outlook in cases of meningitis accompanying feeble-mindedness is not good.

The treatment of epileptic fits can be best described by the following card of instructions which is hung up in all the elementary schools in Cheshire.

EPILEPTIC FITS AND CONVULSIONS, AND HOW TO DEAL WITH THEM

Warning Signs.—In epileptic children the oncoming of a fit may be suspected by the occurrence of twitchings of the face or limbs, complaint of headache or unusual restlessness, dulness or irritability. In such circumstances the teacher should (without drawing special attention to the child) withdraw the child from the class and place him in a safe position, so that in the event of his having a fit he would not be hurt. Care should be taken not to scold such children or unduly strain their systems either physically or mentally.

An Epileptic Fit usually commences by the child

giving a short cry and falling to the ground. At first the body may be rigidly fixed in one position, but this symptom, if present, only lasts a short time. Convulsive movements of the face, body and limbs then set in: there may be foaming at the mouth, and, as the tongue is frequently bitten, the froth may be tinged with blood. The convulsive movements gradually cease, and the child will then lie quite limp and in a stupid or drowsy state.

Treatment.—1. Lay child on floor and move furniture, etc., away from him, so that he cannot hurt himself during convulsive movements.

2. Loosen the collar and all tight clothing about the neck and chest.

3. Hold a wooden penholder or pencil in between his teeth well back in his mouth, to prevent his biting the tongue.

4. Do not attempt to check the convulsive movements, but merely guide the limbs so that the child does not hurt himself.

5. *Do not give anything to drink.*

6. When the child becomes conscious keep him quiet for a short time: then send him home *under proper care* and with a *note* informing his parents of the attack.

Syphilitic Cases.—Mental defect in such cases is, again, of no particular type, and usually does not show itself till the period of second dentition arrives. The diagnosis is important because of the possibility of anti-syphilitic treatment averting early death. In parenthesis I may remark that during the past few years the diagnosis of syphilis by means of the Wasserman test and its treatment by salvarsan or neo-salvarsan has materially improved the medical outlook. The diagnosis of mental deficiency due to inherited syphilis is, of course, a medical matter, but I think it is im-

portant that as teachers in charge of large numbers of young children you should know something about it. Radiating scars about the mouth are significant of this condition (Fig. 5). The teeth are peg-shaped or notched at the point and ribbed on the surface of the enamel. Skin eruptions with a peculiar colour, best described as that of the lean of ham, and which are persistent, are commonly found: the eruption is usually pimply and is to be found on all parts of the body. It is important in suspected cases to examine the brothers and sisters as well as the suspected child itself, for it sometimes happens that the mentally defective child will show none of the signs I have mentioned, but its normally-minded brothers and sisters will.

The type of mental defect associated with syphilis is what is known as general paralysis of the insane. The affected children do not respond to education or improve in any way. Gradually they begin to show evidences of mental defect and progressive paralysis, and the chief peculiarity of this is that they get exalted ideas of themselves and their powers. Usually they become worse rapidly, the paralysis extending to various parts of the body, and they die in a few years.

Oxycephaly.—This is the form designated "Tower skull" (Fig. 6). It is not at all frequent. Ocular (vision) defects are common. The appearance presented by the skull is that of a dome of irregular shape rising up from the forehead. The eyes are usually large and prominent; the ridges of bone above the eyes or eyebrows are usually shaved off. The patients often suffer severely from headache and from fits of no special type during childhood.

Scaphocephaly.—This is hardly a special type, but rather a peculiarity of skull formation common to several grades of mental deficiency. It is sometimes known as

PLATE II



FIG. 5

Inherited Syphilis

(Reproduced from "Mentally Deficient Children," fourth edition, by kind permission of Dr. G. E. Shuttleworth)

To face page 26]



the "prow-shaped" skull, *i.e.* a skull tapering to a narrow and prominent ridge in front. Children who are mentally defective and who possess skulls of this shape are usually highly neurotic at intervals. The theory is (I give it for what it is worth) that the neurones or nerve cells in these cases are defective in constitution, so that instead of discharging impulses regularly under the response of stimuli the discharge



FIG. 6.

of such impulses is irregular owing to the inhibitory or restraining mechanism of the brain failing in action at the same time. Obviously this is no real explanation, but only a restatement in scientific terms of the fact that such children are neurotic at irregular intervals.

Often in their early days these patients show no marked signs of mental deficiency, but are specially apt to break down at the period of puberty or when the second (permanent) teeth are coming through.

Primarily Neurotic Cases.—These are children whom

Dr. Potts has well called "weak all through." Usually the children of neurotic parents, they are almost from birth "slackness personified." Mentally and physically they are flabby and devoid of energy. If you ask them to keep their eyes fixed on an object just in front of them and at a proper level, so that they can see it with ease, their gaze will wander away very quickly. Asked to hold their hands and arms straight out in front of them, they will lift them slowly with the hands not up to the shoulder level and with the fingers drooping: gradually the wrist will drop, the fingers bend, one arm will sink down and then the other. Twitchings, tremors, and irregular nervous movements in such cases are common. Inquiry into home circumstances will reveal the fact that the father or mother, or both, are neurotic and probably inebriate. Removal to an institution is the only satisfactory treatment for such cases, and sustained control for many years is called for; otherwise, when adult life is reached, the subjects of this disorder will be very likely to become inebriate or criminal. Suitable drill and exercises in healthy surroundings and graduated mental training under firm hands will effect a great deal of good.

Other Associated Conditions.—There are certain peculiar nervous movements, many of which are associated with mental defect, with which you should have some acquaintance.

You all know something in a general way about chorea or St. Vitus' Dance—a fairly common complaint in school-children. Let me draw your notice to some conditions simulating this disease.

Mild chorea is often mistaken for mere fidgetiness, clumsiness, awkwardness, wilful bad writing or scrawling, habit-spasm, microkinesis (Warner) and choreiform movements due to intestinal worms.

Habit-spasm is the repetition of *one* movement or *one series* of movements, *e.g.* shrugging the shoulders, tossing the head, clearing the throat, screwing up the eyes, and so on: after a week or so of one movement a different one is adopted: in *chorea* there is a rapid change of movements, and the affected child will be twitching the fingers one moment, shuffling the feet the next, wrinkling the forehead the next, and so on. Medical treatment is required in both cases.

Mikrokinesis is a kind of capricious fidgetiness which is in some degree natural to all children, but which becomes exaggerated when the child is out of health or knows some one is taking notice of it: the movements are really nothing more than one usually sees with an extremely sensitive and shy child, and they never become worse. Feeble-mindedness is not indicated.

Other conditions are head-rolling, head-banging, (usually due to disease of the ears or teeth), body-rocking, teeth-grinding, pica (or perverted appetite), and so forth. All of these call for most careful and detailed inquiry by the Head Teacher and Medical Inspector, for mental defect usually accompanies them.

CHAPTER III

SOME CONDITIONS OFTEN ASSOCIATED WITH MENTAL DEFICIENCY

Word-blindness and Word-deafness.—In order to explain these conditions, which are not very common in school-children, I must refer to some more or less elementary physiological facts and theories.

There are four chief centres in the brain concerned with the production of spoken or written language, and there are four sets of external organs connected with these brain centres (see Diagram, Fig. 7). The four chief brain centres are the auditory word centre, A, the visual word centre, V, the motor speech centre, M, and the writing centre, W (in which we store the memories of how to produce words in writing). There is also a sub-centre, I, and a very important one, for the storage of the memories of particular words heard or seen, and of the *ideas* which these words represent. The motor speech centre is chiefly controlled by the auditory centre, and the writing centre is chiefly controlled by the visual word centre. The usual lines of connection between these centres are shown in *continuous* lines and subsidiary, specially developed or unusual ones in *dotted* lines in the diagrams. The external organs concerned are the eyes, ears, mouth and articulating apparatus, and the hand (for writing). In addition to the external organs of communication with these brain

centres there may be, in very special cases, another—namely, that of tactile sensation (touch). There may be mentioned in this connection two celebrated cases of women (Helen Keller and Laura Bridgeman), who, though *both* of them were both blind and deaf, were enabled by the special cultivation of the sense of touch to acquire the power of speaking, reading, and writing, and attained a good command of language purely by

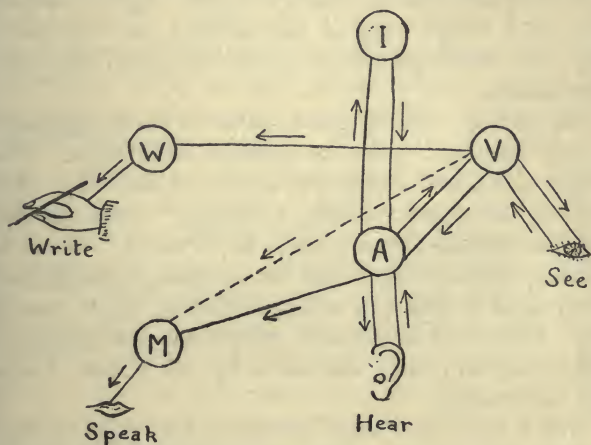


FIG. 7. CENTRES OF NORMAL SPEECH.

A = Auditory word centre.

V = Visual word centre.

M = Motor speech centre.

W = Writing centre.

I = Centre for memories associated with particular words and for storage of ideas which the words represent.

the development of kinæsthetic or neuro-muscular (touch and movement) memory. One of them wrote a book of some note at the time.

These four brain centres may be stimulated to action—(I) by an impulse originating entirely within the brain; here the idea and the will-power come to Broca's area

presumably from the frontal region of the brain (*idea-tion centres*): this is what happens when you do a thing because you want to, or think you will do it: (2) by impulses received by the ear and the auditory word centre, then perceived or understood in the centre, I, where the memories of words, heard or seen, are stored; from this the impulse goes to the frontal regions, from which we suppose the formation of thought and the will to speak pass to Broca's region: (3) the impulse may be a visual one, as, for instance, in the case of deaf and dumb persons who have acquired the art of lip-reading.

The extent to which one or other of these impulses or stimuli may act varies in different individuals. Some people think and remember chiefly in auditory terms, and we call them "strong auditives" (such as those who never need to take notes at lectures): others are "strong visuals," and can for instance visualise whole paragraphs of print, or tell you exactly where you will find a statement in a book: others are kinæsthetics or motor-minded (those who learn by the senses of touch and movement).

Where the *visual* word centre is destroyed or undeveloped we get, of course, *word-blindness*; where the *auditory* speech centre is destroyed or undeveloped we have *word-deafness*; where the *motor* speech centre is destroyed or undeveloped we have loss of the power of the movements necessary to produce speech (*motor aphasia*), though words are still heard and seen and understood. The loss of the power to speak is either that suitable words to express the ideas or wants cannot be found, or if found they cannot be uttered owing to the motor mechanism having gone wrong.

One is apt to speak of *memory* as the power of recalling past impressions conducted to the brain by various

sensory paths (eye, ear, feeling, taste, smell, etc.) and preserved in the brain in *one particular centre* or *general storehouse* of memories. We now know, however, that there is not one general storehouse or centre for all kinds of memories, but that there are several individual centres for the storage of the special memories of vision, of hearing, of taste, of smell, of touch, of muscular movement, etc. These several special centres are intimately connected together with each other, but each one is perfectly independent of the others, so that we may have one of the centres entirely lost or weakened or developed to an unusual extent without any of the other centres being in any way modified in its powers.

Word-Blindness occurs, as I have said, when the visual word-centre is destroyed or undeveloped. Vision is usually normal or nearly so (Fig. 8). The power of seeing letters may still be present : the power of understanding words seen (i.e. of silent reading) is, however, lost. The power of writing to dictation and of spontaneous writing is usually lost also, but in some cases the auditory word centre is capable of stimulating the writing centre, or some imperfect stimulation is possible through the lower visual centres. (The powers of speech and of understanding words heard are, of course, retained.) Children afflicted with this condition will mistake one letter or word pointed out to them for another quite distinct from it : thus, in a recent case I found a child who called the letter B—M, and called R—B, X—C, and so on ; this child could not read the word "dog," but when it was spelt out to him he recognised it at once ; the auditory word centre was normal and took the place of the visual word centre. Some of these children do mental arithmetic wonderfully well and are good at manual work, besides being quite often almost brilliant in everything but reading.

The following description of a case of letter- and word-blindness will illustrate the condition better than any abstract account.

A man aged 58 years, who had always enjoyed good health with the exception of occasional attacks of bronchitis, and who was a teacher of languages and well educated, had for some years been doing rather a

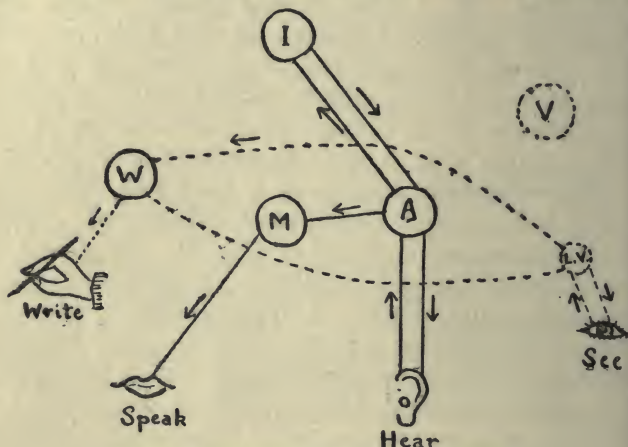


FIG. 8.—CONGENITAL WORD BLINDNESS.

A = Auditory word centre.

V = Visual word centre (out of action).

M = Motor speech centre.

W = Writing centre.

I = Centre for memories associated with particular words and for storage of ideas which words represent.

L.V. = Lower visual centre connected by unaccustomed and poorly trained paths with writing centre.

large amount of mental work accompanied by considerable mental worry. One morning he went to his physician, Dr. Hinshelwood, stating that he had been greatly startled to find that he could not read the French exercise which his pupil had done for him. On the previous day he had read and corrected the

exercise quite easily. He went to his wife and asked her if she could read the exercise, which she did without difficulty. He then took up a printed book, and found he could not read a single word. On being tested for vision he could not read the largest letters of the test type. He said he could *see* them perfectly well, but he could not say what they were—guessing absurdly at their names. He could nevertheless read and name correctly *figures or numerals* with perfect ease. But the page of a printed book looked to him as it would look to a person who had never learned to read. And he could write to dictation fluently and correctly, though he was unable to read what he had written, and he spoke as well as ever. No mental defect of any degree was present.

A certain eye defect—loss of the right half of each visual field—was present, and, of course, the brain centre for the storage of visual memories was thrown completely out of action. After a long rest he began to learn to read again, starting with the alphabet and working through a child's primer: after several months he is now able to read slowly, laboriously, and with occasional mistakes. He has only occasionally practised reading *written* characters, confining himself to print, and therefore the reading of writing—even what he has himself just written—is still very imperfect. He still reads figures or numerals as fluently as ever.

This is a case of complete letter- and word-blindness. One does not often come across such complete cases, but partial cases are moderately common—*i.e.* cases where the patient can read words but not the individual letters of the alphabet, cases where patients can read some words or letters but not other words or letters, cases where the visual memory for musical notes is lost, cases where the visual memory for German or

Greek characters is lost, and so on. (See Hinshelwood's book on *Letter, Word, and Mind-Blindness*, from which the above case has been abbreviated.)

Word-Deafness is due, as I have said, to destruction or impaired development of the auditory word centre. Children suffering from this condition cannot understand words heard, and are precisely in the position of

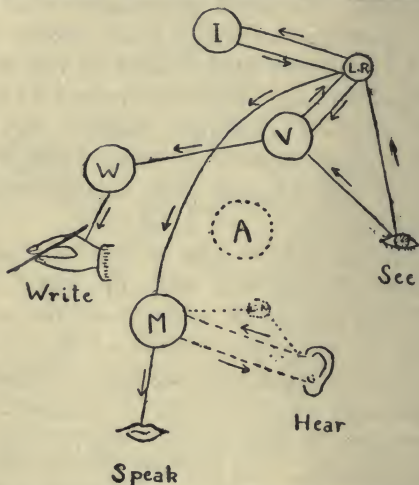


FIG. 9.—CONGENITAL WORD-DEAFNESS.

A = Auditory word centre (out of action).

V = Visual word centre.

M = Motor speech centre.

W = Writing centre.

I = Centre for storage of memories associated with particular words and of ideas which the words represent.

L.R. = Specially developed lip-reading centre connected with visual word centre

L.A. = Lower auditory centre connected with ear and with motor speech centre, which is supposed to come into play when echolalia is a marked feature (see text).

a person listening to a foreign language which is unknown to him. The child affected is *not deaf*, but *word-deaf*—i.e. understanding does not follow hearing. Such

children are often thought to be deaf for this reason, or else to be imbecile. Their speech, however, is normal in pitch, intonation, and articulation, and is readily distinguished from the monotonous drone of the congenitally deaf child. The path between the centre for the storage of memories of words heard and the other language centres is also broken, and therefore, in most children, the condition means the entire loss of understanding of language. The motor speech centre is also put out of action because it is dependent on the auditory word centre for stimulation (Fig. 9). Sometimes, however, the motor speech centre remains active but is so uncontrolled, owing to the destruction of the auditory word centre, that the person affected can speak but cannot say what he wishes to say (does not know what he is saying), and uses the most unsuitable and irrelevant words, although the intelligence may be quite unimpaired. He may, for instance, if he wants to ask you to "take a seat," tell you that "you are a villain," all this without understanding one word of what he is actually saying.

The more intelligent of such children acquire the faculty of lip-reading, *i.e.* develop the visual word-centre to make up for the loss of the auditory centre. The less intelligent often develop no further than the stage of echolalia, *i.e.* they repeat words spoken without understanding them.

Great care must be taken not to classify children suffering from word-blindness and word-deafness as imbeciles, A careful examination will reveal the absence of imbecility, for the child will be able, for instance, to name correctly things pointed out to him, can copy complicated diagrams, can calculate rapidly as a rule, and will be clever at manual work.

The proper recommendation to make in such cases

is that children suffering from word-deafness should be placed in special classes or schools for the deaf and taught lip-reading, and that those suffering from word-blindness should be placed in classes or schools where their kinæsthetic (touch and sensation) centres and other memory centres can be cultivated on very special lines, *e.g.* making the child learn words by feeling the movement of his lips, the vibration of his larynx, the position of his tongue, etc., as he speaks, and so on. This last is a very tedious and laborious process, and for children of merely ordinary capacity is hardly worth while: the best thing for such children is to concentrate on the development of their manual capacity.

For a fuller account of these conditions, Dr. Hinshelwood's book may be consulted, or an article by Dr. C. J. Thomas in *Public Health*, May 1908 (published by the Society of Medical Officers of Health, 1, Upper Montague Street, Russell Square, London, W.C.).

I am indebted to Dr. C. J. Thomas for permission to reproduce the three diagrams attached to this chapter.

CHAPTER IV

DISTINCTION BETWEEN THE VARIOUS CLASSES OF MENTALLY DEFECTIVE CHILDREN

THIS is an exceedingly difficult matter to determine, and occasionally continued observation over a period is requisite before it safely can be ascertained. The distinctions I mention are only intended as roughish guides. In the attributes I present to you I have followed Dr. Tredgold very closely.

I. FEEBLE-MINDED

The cranium is commonly abnormal in size or shape, or asymmetrical: its circumference during school age is about $\frac{1}{2}$ inch less than that of a normal child of corresponding age: this difference becomes more marked as the child grows older, and at 14 to 16 years the difference may be 1 inch or more. Dentition, standing, walking, and talking usually will be found to have been delayed: the child may not have uttered a word till from 4 to 6 years of age. The circulation of blood is feeble, and chilblains and cracks in the skin are frequent in cold weather.

The general vitality is at a low ebb, and illnesses are frequent. Response is heavy, stolid, and slow, though one does meet with cases where the reverse is the case to excess. Movements are usually clumsy, imperfectly co-ordinated, and somewhat laboured. Speech

is often defective as well as late in appearance. Attention is readily distracted and only held with difficulty. Parrot knowledge is fairly readily acquired. Hand-work is often excellent and done with dexterity. The logical sense is usually lacking, and initiative and constructional imagination are both considerably deficient.

2. IMBECILES.

The instinct of self-preservation is present, and most imbeciles have the sense to know, *e.g.*, that if they put their finger into a flame it will burn them.

Imbeciles can do simple jobs under some supervision. They cannot as a rule maintain a rational conversation for more than a very few minutes.

The body is usually ill formed, and balance and gait are defective. The expression is either "a stolid vacuity or a fatuous and childish smile, or a look of sly cunning" (Tredgold, *Mental Deficiency*). "Excitable imbeciles are constantly chattering, running about and generally interfering with everybody and everything" (*loc. cit.*). Scholastic acquirements are exceedingly poor: the reading of a few very simple words, the addition or subtraction of simple numbers, making use of their fingers or of beads, marbles, etc., can be taught, and the names and uses of common objects are retained with much difficulty. "Some are clean in habits, modest, and possess a tolerable sense of decency: others are absolutely destitute of any idea of shame or modesty" (*loc. cit.*). There should be no difficulty in the recognition of this class of mental defect.

3. IDIOTS.

I agree with Dr. Tredgold when he says that the line of demarcation between the imbecile and the idiot is

that of the power of guarding himself against common physical dangers, and this is the view taken in the definition of this class in the Mental Deficiency Act.

The abnormalities of anatomical structure and physiological function reach their highest limit in this class of case. The "majority are such stunted, misshapen, hideous, and bestial specimens of morbid mankind that they arouse feelings of horror and repulsion" (Tredgold, *loc. cit.*).

Paralysis partial or complete is very frequently met with: epilepsy is found in about half the cases: they feed voraciously and gluttonously, and will, even as children of a few years of age, snatch the food from the baby. They cannot wash or dress themselves or do their own hair, and often cannot feed themselves. They cannot reason at all, and fail to connect simple words with the objects to which they refer. Notions of right and wrong cannot be instilled into them. Speech is limited to a few primitive words, and animal cries are common. Destructiveness is a common symptom. Head-nodding and body-rocking, finger-sucking, ceaseless chanting or humming of a tune are frequent practices, and seem to be pleasurable. They are scarcely human in their attributes, and from the diagnostic point of view are unmistakable.

MEDICAL TREATMENT.

I have alluded to the thyroid treatment of cretinism, and to the possibilities (for I do not care to put them even a shade higher than this) of anti-syphilitic treatment by salvarsan. We are just in the age of the development of treatment by extracts of internal glands such as that of the thymus gland, the pituitary

body and the suprarenal glands, and it is too early yet to say what their potentialities may be. There is a hope, but nothing more. Observation of the results of administration of these substances requires considerable time before a sound opinion can be formed, and that time is not yet. We are in the experimental stage, and have got about to that point where we administer a small dose of the extracts of each of four known glands, hoping that one or other may secure a benefit in the condition.

As regards the *epileptic* there is no doubt that the regular life of institutions, the regular and selected diet, the absence of improper excitement, and the medicinal treatment of excitability by bromides have effected a considerable improvement both in the frequency of occurrence of fits and in the improvement of the mental condition. Some cases of Jacksonian epilepsy (caused by pressure of bone, blood-clot, inflammatory exudation, etc. on the motor areas) can be distinctly improved, if not cured, by surgical operation. And operation in such cases is entirely justifiable. In cases of microcephaly, oxycephaly, and hydrocephaly, and certain other malformations of the skull which it was reasonable to suppose caused interference with the growth of the brain, it seemed natural at one time to suggest operative remedies. But though a number of operations have been carried out in an attempt to relieve these particular conditions by some of our most competent surgeons, none have been successful, and they are now regarded as unjustifiable.

But medical treatment undoubtedly can assist in the training of the mentally defective—at least, we can prepare the ground for the proper reception of teaching. The mentally defective child, as you will have gathered, is usually the subject of many concomitant ailments,

and if we can remove these impediments we shall have put the child in the best possible condition for your efforts as teachers to produce a good result. I need only allude in this connection to the clearing of the paths by which knowledge reaches the impaired brain—*i.e.* the removal of adenoids and enlarged tonsils, the cure of deafness and of defective sight, the extraction of carious teeth, which so often excite attacks of epilepsy or habit-spasm and otherwise distract attention, the cure of impeding contractures of tendons, the inculcation of hygienic dietary and mode of life, the remedy of anæmia which impoverishes the already imperfectly nourished brain, the prevention and cure of tuberculosis, the improvement of walking by operation on club-foot, etc.—all these are methods by means of which the surgeon or physician can at least make your work easier and more certain of useful result. Where the doctor comes into this scheme of things is thus fairly apparent. It is to him that we look for the recognition of the original responsible cause of the child's mental defect, and for the removal of such impediments to its improvement as medical and surgical science has so far rendered practicable. Though this may sound in the nature of an apology for our entrance into the sphere of pedagogy, I can assure you, in no uncertain voice, that it is no such thing. Our knowledge of the causation of mental defect, of the many things which are at work to perpetuate or intensify mental defect, of the diagnosis of the particular cause which is producing the defect in question, of the mental outlook which is likely to accrue, of the medical or surgical treatment which is demanded in certain cases, and even of the lines on which educational training can proceed with the best chance of good results should all be valuable, *if not essential*, to those of you who wish

to make some educational advance on what has hitherto been accomplished.

You are as essential to us as we are to you. Both of us are out to make a lot of bricks with but a little straw, and it will only be by the *very closest* co-operation between the doctor and the teacher that any bricks can be made at all.

CHAPTER V

THE MORAL IMBECILE

THIS class of child is a thing apart. Probably the best definition of him is that given by Sir James Crichton-Browne in his evidence before the Royal Commission :—
“ The moral imbecile is a person who, by reason of arrested development or disease of the brain, dating from birth or early years, displays at an early age vicious or criminal propensities which are of an incorrigible or unusual nature, and are generally associated with some slight limitation of intellect.” This tallies very closely with the definition contained in the Mental Deficiency Act, 1913, which runs as follows :—

“ Moral imbeciles ; that is to say, persons who from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect.” You will note that this definition differs from all the other definitions of mentally deficient persons, in which you will find the words “ *from birth or from early age.*” Obviously morals cannot be judged from birth.

There are three points to be noted in this definition :

- (a) Permanent mental defect must exist ;
- (b) The child must be the subject of strong vicious or criminal propensities ; and

(c) Appropriate punishment must have been tried and failed as a deterrent agent.

Taking these *seriatim*, the presence of "permanent mental defect" in these cases is often very difficult of proof. Many of these children are quite unusually gifted in some particular art or craft, and in many of them there is displayed a logical sense of a fairly high order. Take the case of a moral imbecile whom I have lately seen: his criminal propensities were of the "burgling" order, and in carrying out his schemes he had evidently thought out in the most careful detail the probabilities and possibilities of his capture and had safeguarded himself on the most ingenious lines against them all. The mental defect present must have been a warp in the centre, if any, controlling the moral actions of the individual—a thought which makes one seriously wonder whether or not one's moral decisions are governed by a brain centre as universally active as the centres controlling muscular movement, for example.

The strength of the vicious or criminal propensities must always be judged, *and this most carefully*, by the standard of environment. Surroundings, as we all know, influence the conduct of the most sane of us to an appreciable extent. Children and even grown-ups often say and do things without a moment's thought as to what they mean, and are often horrified when the realisation of the words or action is brought home. Removal into more proper surroundings often effects a complete cure in cases solely due to bad environment. But in the case of the moral imbecile we are not concerned with sudden—almost irresponsible—lapses from propriety at times when the propriety of words or actions should be, but are not, appropriately realised. We are up against the problem of the failure of the

defective to recognise the fact that the words or the actions have actually been improper under the special circumstances of the case ; in other words, we have to prove that the moral " concepts " of the individual concerned are naturally warped and twisted. Dr. Blandford, in his Lumleian Lectures delivered before the Royal College of Physicians (*Lancet*, April 6th, 1895, p. 857), has aptly described these children in general terms as follows :

" Though children in mind, they are very often men and women in wickedness and vice ; and it may be necessary to place them under restraint or to protect their property from being squandered and themselves being robbed. I know no class over whom controversy is so likely to arise, or where we may have greater difficulty in forming a diagnosis. They are not idiots ; many of them have acquired a fair amount of education, can construe a Greek play, or master a proposition of Euclid. Their memory is excellent, and we cannot compare their condition with a former one, for they have never been any better, so that this test fails us. They have no delusions or hallucinations, and are not insane in the ordinary sense of the word. With regard to many there is no difficulty. When a man or woman of forty submits to be treated like a child of ten—to be taken out and amused, and to have 6*d.* a week pocket money—we have not much difficulty in forming an opinion. But the development of others is not so low ; yet they are deficient in reason and judgment, and often in conduct. There is a tendency to low and depraved habits, to brutish and sensual enjoyment, to low company amongst whom they are of more importance ; and if remonstrated with they show an absolute disregard for truth or for right behaviour. In examining any such individual we must consider his conduct

in regard to his environment and bringing up. What might be passed over in the lower walks of life is, in the higher, evidence of a degraded mental state."

The absence of any deterrent effect of punishment is a point to be carefully considered. In the true moral imbecile, as distinguished from the child suffering from wrong moral tendencies caused by improper environment, punishment does not in fact deter from a re-commission of the wrong-doing. The moral sense being absent, the punishment of a true moral imbecile is as illogical as would be the punishment of a paralysed child for not moving the limb which is crippled. There is no conscience to which an appeal can be made on the ordinary lines; such children are by nature anti-social, anti-religious, and anti-æsthetic. The senses of shame, honour, modesty, truth, and propriety are one and all absent or sadly impaired *ab initio*. The moral imbecile finds scope for his actions in numbers of ways: pilfering, lying, cruelty towards fellow children and towards animals often of the most revolting description, destruction of property, pocket-picking, train-wrecking, using foul language, true as distinguished from "magisterial" kleptomania, running away from home, sleeping out at night, playing truant, arson, indecencies, wilful uncontrollable impulses to commit injury to themselves or others, vile sexual habits—these, one or other or a combination of them, are all exemplified in the actions of the moral imbecile. Teachers and others are not infrequently thrown off their guard by the engaging aspect or manners of the moral imbecile, and the highly plausible explanations offered for misconduct. Here let me once again warn you against forming an opinion on mental deficiency from facial appearance alone. Probably the worst mistakes in this connection are made with the moral imbecile.

Fortunately the true moral imbecile is not common : statistics are not easy to obtain, but probably only from 2 to 3 per cent. of the *mentally defective group* are real moral imbeciles.

The three essential features in the diagnosis in this special form of mental defect are exemplified in the definition as amplified in the text of this chapter (*vide antea*). In extension of this one may add the following very important consideration insisted on by Drs. Shuttleworth and Potts, that "the crime is out of all proportion to the temptation, and that the moral shortcomings are not to be explained by training and environment." One finds fairly frequently, in this class of defective, children who are very easily led to commit wrong actions and who are readily drawn into temptation with disastrous result.

As regards the outlook it is usually poor. Nothing but close observation and long, firm, and judicious training are of any use with this type of child. For those entirely lacking in moral sense lifelong detention in an institution, where opportunities for wrong-doing are naturally very few, is the only hope. The treatment of this class of case is a most difficult one. The first thing to endeavour to establish in the mind of such children is the relationship between right and wrong doing and reward and punishment. Incentives to good behaviour in the shape of gifts, wearing of special uniform (in institutions), allocation to special more or less important duties (such as door-keeping, messenger), the wearing of a good-conduct medal and such-like, and, for misconduct, deprivation of some special article of food, or of attendance at entertainments or games—all these may make the impression on the dulled intellect of the child that it "pays" to be good. Example is

better than precept in such cases, and the teacher should be most careful to exhibit, and even to be ostentatious in the exhibition of, such qualities as truth, kindness to others, justice, straightforwardness, sympathy, discipline, and order.

CHAPTER VI

THE BINET-SIMON TESTS

WHAT are known now as the Binet-Simon tests for feeble-mindedness are certain tests of intelligence designed to introduce methods of scientific precision into educational work in place of mere empiricism or rule of thumb. Binet set himself to form a scale or series of tests by which intelligence should be measured in more or less set terms. He supposed there to be a normal or average intelligence for each age, just as there is a normal height for each age. He tried each of the devised tests in conjunction with his colleague, Dr. Simon, on a number of children of average mentality, and if a majority of such children answered satisfactorily he set down that test as a fair one for a child of the age in question.

In 1911 a revised scale was published, and I give you a few examples from that.

For a child of 3 years.—Show me your eyes; Show me your nose; Show me your mouth. I am going to say two numbers—say them after me—3, 7: again—6, 4: again—0, 5. Say this sentence after me—"I am cold and hungry." A sentence of six syllables should be remembered at this level.

For a child of 4 years.—Are you a little boy or a little girl? Name a key, a penny, a knife, etc. Repeat three figures named. Which of these two lines is the longer?

For a child of 5 years.—Which of these two boxes is the heavier? (Boxes either both the same size or the lighter one the larger.) Copy a small square (with sides about $1\frac{1}{2}$ inch). Imitate a pattern card. Count these (4) pennies and say how many there are.

For a child of 6 years.—Is it morning or afternoon now? What is a fork? What is a table? A chair? A horse? A mamma? At this age definition by reference to use should be attained—e.g. “a fork is for eating with.” Which is the prettier of the two faces I have drawn? Copy in pen and ink a drawing of a diamond of which the sides measure $1\frac{1}{2}$ inch and the acute angles are 60 degrees. Count 13 halfpennies placed in a line on the table.

For a child of 7 years.—Show me your right hand—your left ear. Do you see this key? Go and put it on that chair. Then close the door—then take the box which is lying on the chair near the door and bring it to me. First put the key on the chair, then close the door, then bring me the box. How much money is there here altogether? (three pennies and three halfpennies are placed on the table). Name correctly the four colours, red, blue, yellow, and green.

For a child of 8 years.—You know a butterfly?—and you know a fly? Are they like one another? Well! in what way are they not alike? The same questions are asked about wood and glass, and paper and cardboard. Two comparisons at least must be given correctly. You can count, can't you? Well, will you count for me backwards from 20 to nothing? Begin, 20, 19 . . . One error is allowed and the task must be finished in 20 seconds. I am going to say five numbers: listen and repeat them after me—5, 8, 2, 9, 1; again—3, 7, 5, 2, 0; again—1, 3, 7, 2, 9: one success will suffice.

For a child of 9 years.—Would you like to play shop? You be shopkeeper, I will buy from you this box: it costs 2d. Here the examiner hands the child 1s. Now will you give me change out of this money here? In order to give the change the child is provided with one of each of our current coins—sovereign, half-sovereign, crown, half-crown, florin, shilling, sixpence, threepence, penny, halfpenny, and in addition five halfpence and six pennies. Will you tell me the names of the months in order? One omission or one inversion is allowed to pass. What would you do if you missed a train? What would you do if one of your playmates hit you without meaning to do so? What would you do if you broke something belonging to somebody else?

For my own part I prefer the following modifications of the Binet-Simon series. My own view is that they are slightly more easily put and consequently more easily answered. I quote them subject to the subsequent criticisms I have to offer to these tests as a measure of the intellectual level of the child examined.

5 years.—Count four marbles, touching them with your fingers as you count them.

Show a penny and ask the child what it would buy with it.

Show a knife and ask what it is used for.

Show three marbles, cubes, or toy bricks varying very slightly in size and ask the child which is the biggest and which is the smallest.

6 years.—Count ten marbles as in previous test.

Copy a simple figure (square, diamond, parallelogram).

What time of day is it now—morning or afternoon? How do you know it is morning (afternoon)?

Show a drawing of a smiling and a pouting face and ask which is the prettier.

- 7 *years*.—Show a simple picture and ask the child to point out the chief items in it.

Give an errand containing three items—Put this pencil on the table, then close that door, then bring me your cap.

Put three pennies and three halfpennies on the table and ask how much money is there.

Ask the child the colour of four different articles (elementary or primary colours only).

- 8 *years*.—Count backwards from 12 to 1.

Why is a bicycle wheel not like a cart wheel ?
What day of the week and what month is it ?
Repeat five figures after me.

- 9 *years*.—What are the following articles for—a boot, a table, a chair, a cow, a horse, a railway train ?

How much change out of a shilling would you bring if I sent you to buy a pound of sugar costing 3*d.* ?

What would you do if you hit another boy without meaning to hit him ?

What are the names of the months of the year—January . . . ?

- 10 *years*.—Tell some impossible story in simple language and ask the child what there is silly about it.

What would you do if, when you got to school (home), you found the door locked ?

What would you do if some one lent you a nice penknife and you broke it ?

How long is this table ?

- 12 *years*.—Where does the sun go to at night ?

Show a picture with five or six prominent items

in it, and after a lapse of about three or four minutes ask the child to tell you the items.

Test the child's ideas of justice and kindness by simple illustrations.

Tell me the names of any fishes you know.

14 years.—Where do we get the stuff to make your clothes ?

Where does coal come from, and how do we get it ?

Repeat seven numbers after me.

How many people could get into this room all standing up ?

Tell me the time from this watch. What would you do if it stopped ?

GENERAL NOTES ON BINET'S TESTS

A quiet room is necessary. Though encouragement should *always* be given, no criticisms or explanation should be offered. Begin always with an easy test, and always give marks only for a *perfectly correct* answer, if you wish to classify the child on Binet's scale.

A child who can do four or five tests for a year in advance of his age may have his intellectual measure advanced by one year. Any child three years or more below the level at which he should be will most probably be feeble-minded.

One finds that *idiots* will vary in classification from that of infants to that of about two years of age: *e.g.* they will only just be conscious of a bright object moved before their eyes or attempt to grasp it. *Imbeciles* who can talk vary in intellectual standard from two to about seven years of age. A child of nine who can only answer to the five-year-old tests would be on the border-line between imbecility and feeble-mindedness.

That these tests are of utility in assessing intelligence in terms of years of age (as an "intelligence measuring scale" as some one has said) there can be no serious question. Whether they afford a means of ascertainment of and classification of degrees of mental defect (idiot, imbecile, feeble-minded) is quite another matter. A good deal depends on the temperament of the child and its self-confidence. Some children, as has been well said, refuse to "unpack their knowledge" straight away, and want to know a good deal about the interrogator before they will utter a word. The tests are generally said to be too easy at the lower end and too difficult at the higher end of the scale, and with that I quite agree.

As a means of recording progress in mentally defective children from one period to another they are most useful. Here we must obviously apply tests which do not vary from time to time, just as in recording weight and height we must always use a standard scale. For example, if when we first tested the child he passed the 4-year-old tests but failed at the 5- and 6-year-old tests, and when next examined after a period of special education he passed the 6-year-old tests, it would be fair to register a gain in intelligence of two years on the Binet scale. For this purpose some scale of measurement is obviously required, and at present Binet's is the only one generally available.

Let me give you a few warnings if you desire to use Binet's tests. Don't help or prompt the child to the correct solution: the child should be able to see for himself, if the question is properly put, what the examiner wants—in fact, this is the essence of the test. Don't show by your manner that the child has not satisfied you with his answer; at the most say—"Well, you are nearly right," and so on; show that nearly all

answers are pleasing to you—if the answer is absurdly wrong, just smile, but at the same time mark down a failure. Try to keep the child up to that level at which he will put forth his best. “If you are not certain that the child should be allowed to pass the test you may be practically certain that he should not” (Binet-Simon, *Mentally Defective Children*). Never forget that the previous associations of the child have a great deal to do with his mental attainments: a child bred in a London slum might answer certain of these tests far better than a country-bred child and yet might not be on the same level of intelligence. So take the environment carefully into consideration in making your assessment.

In assessing intelligence I attach very great importance to what the Board of Education, following the Medico-Psychological Association of Great Britain, call the “general concepts” of the child. And I do so because of the definitions of the several classes of mental defectives contained in the Act of 1913. Under this we have the *idiots* who are unable to guard themselves against common physical dangers, the *imbecile* children who are incapable of being taught to manage *themselves or their affairs* (note particularly the last four words) and the *feeble-minded* children who are permanently incapable of receiving proper benefit from the instruction given in ordinary schools. The “general concepts” of rights of possession, of self-protection, of purpose in life, of concentration and of initiative, surely in themselves afford an adequate means of grading all the mentally defective children with whom we are likely to have to deal. I am leaving out the moral defectives as cases to be dealt with specially.

Tests of these “general concepts,” as indeed all other tests of mentality, must be assessed by reference to

what an average normal child of corresponding age would give as an answer, and it is therefore of the greatest value for those practising them to make themselves familiar with the kind of answer that a normal child would be likely to give. Suppose one is testing the child's concepts of "rights of possession" in the case of one aged five or six years. One would probably apply this test by saying—"Show me what you have got in your pocket." The child would produce some pet possession, and one would then take this and say, "Ah, I like this—I am going to keep this," and proceed to put it into one's own pocket, meantime closely watching the child's face. The normal child's next procedure would depend on several things, but chiefly on its natural disposition and the value placed by it on the particular possession seized. The emotional, though normal, child would very soon have tears in its eyes, the impulsive normal one would burst out with a protest and a claim for restoration of the article, the apathetic normal one would probably incline to a smile and might rise to a feeble claim to have the article back again. In the mentally defective group the idiot would probably not understand the request, the imbecile would grin vacuously and be unperturbed at the proceeding, the feeble-minded might so far understand as to look a trifle glum at its loss. Then one would proceed to say, "Why, what's the matter? Isn't it right (or nice) of me to take your top away?" The idiot would still be drawn blank, the imbecile would probably continue to grin or he might even rise to a negative reply, the feeble-minded would generally say "no" and stop at that. One would then, in the case of the high-grade imbecile or the feeble-minded, say, "*Why* isn't it right (or nice) of me to keep the top?" Here we must revert again to the probable action of the normal

child. He would say at once—"Because it isn't yours," or "Because it's mine." This would compel one to go a step further and say—"Well, that doesn't matter, I'm going to keep it: what will you do now?" The normal child would say at once that he would tell his "mummy" or tell the teacher, or, if of the impulsive or the plucky kind, he would make a grab for it. It is in this further stage that the mentally defective child breaks down—the question "Why isn't it right (or nice) of me to keep the top?" would probably stump the imbecile altogether, and if that did not close the incident the further question as to what he would do when you declared you were going to keep the top certainly would. Now we are left with the feeble-minded. He would probably have sense enough to tell you that it was not right of you to keep the top because the top was not yours to keep; and if he were a high-grade case or one accustomed to go to his mother or his teacher when up against a difficulty, he would probably tell you, in answer to your declaration of intention to keep the top in spite of this, that he would then appeal to some one else. If this should be done the test should be carried a step further. You should then take the top from your pocket, handle it in front of him for a moment, remarking what a nice top it is, put it back in your pocket again saying that you are going to keep it, get up and say that you are now going away with it and proceed to make preparations for going. The normal child under such circumstances would make a grab at the top when you produced it, and if he failed to secure it would cry out for it vigorously. The feeble-minded child of this age would, I think, have come to the end of his resources and at the most might seek consolation in tears. If, on the contrary, he still rose to the level of the normal child the test would

have to be carried still another stage further. For instance, you could then say—"But it's just as good to me as it is to you, isn't it?" The normal child would probably say—"No, because I can play with it and you can't," or the equivalent of this. But the feeble-minded child would, I think, break down at this stage.

I have gone at some length into this test as an illustration of the manner in which these tests of the child's "general concepts" should be applied. The other concepts may be tested on similar lines, that of "self-protection" being the easiest to assess and that of "purpose in life" probably the most difficult.

Now let us consider briefly the tests of "general concepts" afforded by the Binet-Simon gauge. Going through these tests one finds but little which can draw out a child's ideas on these points except perhaps that of concentration until one comes to the 9-year-old tests, where the No. 5 test (revised edition) will give some idea of the child's initiative and purpose. Under this test a child is asked—"What would you do if you missed a train?"—"What would you do if a playmate hit you without meaning to do so?"—"What would you do if you broke something belonging to someone else?"

Under the Binet 10-year-old test concentration is easily tested, purpose not so easily, self-protection and possession not at all; but initiative is readily gauged. Concentration is quite easily tested by the earnestness of purpose evinced in the reproduction of two drawings which the pupil is allowed to look at for ten seconds, and in the attention paid to certain sentences containing something obviously foolish and impossible. Initiative is easily gauged by questions such as—"What would you do if you were made late in getting to school?" but I am not quite so sure that it is fair to ask a child of this age such a question as—"Why

should one judge a person by his acts rather than by his words? ”—which is one of the tests set for this age-period. Beyond the mere repetition of a well-known proverb (“ Actions speak louder than words ”) I doubt whether any of us here could enlarge very much on this question. We are not accustomed to argument of this kind on a subject which is so much taken for granted, and I do not think it is fair to plump a question like that at a child of 10 or even 15 years of age, especially when we consider that the child’s answer is to be taken as a measure of its intelligence.

When one comes to consider the test advocated by Binet and his colleague for adults I find serious cause for quarrel with them. Here is one: “ There are three principal differences between a King and a President of a Republic—what are they? ” This demands for a proper answer (and Binet apparently insists on all three differences being pointed out) a knowledge of constitutional law which most of us could not summon up at once except in a very general way. Test No. 5 for the adult on the Binet scale is one touching on the value of life, and appears to deal with the propriety or otherwise of classing it as a good one or a bad one according to whether it happens to be adequately filled with happiness or unduly loaded with misfortune. The person under examination is asked to listen to the following passage being read and afterwards give the examiner the sense of the passage. “ Many opinions have been given on the value of life. Some call it good, others call it bad. It would be more just to say that it is mediocre, for on the one hand our happiness is never so great as we would have it, and on the other hand our misfortunes are never so great as others would have them. It is this mediocrity of life which makes it just, or rather which prevents it

from being radically unjust." I have given some thought to the possible answers to this enigma, and have arrived at the conclusion that some of us who are not good at paraphrasing might run a serious risk of being classed as mentally defective if this test were made the criterion.

You will have judged by what I have said that I have no strong leaning towards Binet's tests as a means of settling the all-important question of whether the child is mentally deficient or not. As a means of grading the child according to the age of development they may, as I have said, be of some value, but I do not think that matters a great deal. As teachers you are asked to say whether the child concerned is capable of education in an ordinary public elementary school, or whether it needs special education in a special class or school, and I should advise you in this connection to rely on your common sense and experience and on your estimate of the so-called "general concepts" of the child which I have alluded to already.

CHAPTER VII

ILLUSTRATIVE CASES

THE following extracts from notes of cases recently examined by me may be of value as illustrations of the conditions described in general terms in the preceding chapters.

1. J. W., aged 10. Bodily and mental condition of parents "fair." Maternal aunt died of "fits": maternal grandfather described as "strange." Five brothers and four sisters with no mental taint. Patient began to walk at the age of 3 and to talk at the age of 2. Expression is heavy and dull: cranial circumference 21 inches: hair presents double vortices: tongue is slightly furrowed. Execution of simple familiar commands poor. Stands on one leg with head inclined towards right shoulder. When hands and arms are extended tremor is observable; motor instability is also exemplified by continuous movements of hands. Attention is moderately good: recognition of common objects, sounds, etc., fairly good: has extremely poor memory, as shown by failure to name a few simple objects pointed out to him in a picture three minutes previously. Ideas of length, size, and distance, similarity, etc., very poor. Knowledge of letters of alphabet, reading, ideas of money values, and power of counting, *nil*. Self-protection fairly good: purpose, concentration, possession, and initiative very poor. Temperament varies from apathy, which is general, to

fits of unreasonable excitement at times. No physical defect. Height $48\frac{1}{2}$ inches: weight 57 lbs. Has attended school regularly for five years and is (largely on account of his age) in Standard II. No illness to account for condition. Classified as imbecile and recommended for institutional care.

2. J. F., aged $5\frac{3}{4}$. Bodily and mental condition of parents good: no noteworthy ancestral history. One brother and two sisters in good bodily and mental condition. Had a fit when three months old, and "has never been the same since." Labour was protracted and instrumental, and child's head is said to have been bruised by instruments. Suffers from epileptic fits on three or four occasions on some days, then is free from them for a week or two. Has had no other illness. Began to walk when 12 months old, to talk when 3 years old, and first teeth cut at 6 months of age, Slaver-ing occurs at times. Has very little understandable speech (idioglossia). Control very poor, execution of simple familiar commands poor and of familiar complex movement very poor. Is never still: will not keep hands extended horizontally: sucks his thumb and picks his fingers continually. Attention, recognition of common objects, elementary colours, shapes, and smells, *nil*. Judgment of distance, time, size, length, etc., *nil*. Poor idea of self-protection: ideas of possession, purpose, etc., *nil*. Elementary educational attainments, including manual tests, *nil*. No physical defect. Cranial circumference 20 inches. Is fretful, occasionally violent and of uncontrollable temper, mischievous and inclined to be destructive. Never been to school. Classed as epileptic imbecile and recommended for institutional treatment.

3. B. T., aged 8. Been at school for twelve months, and is in Standard o. Bodily and mental condition of

parents good. Has only one sister, aged $6\frac{1}{2}$ years, who is in good bodily and mental condition. No noteworthy family history. Child's mental deficiency first noticed at about $4\frac{1}{2}$ years of age. Has had no illnesses beyond measles and chicken-pox. Began to walk at the age of 2 and to talk at the age of 6: first teeth cut at the age of 6 months. Articulation defective, with echolalia now and then: at times shouts when there is no need to do this. Sight and hearing good: mouth-breathing due to adenoids. Used to suffer from incontinence of urine both by day and night, but this is said to be improving. No stigmata. Has only rudimentary notions of playing with toys. Makes unsuccessful attempts to dress herself. Can execute familiar simple commands but fails at familiar complex commands. Mother states that she cannot be taught to kneel. Is restless in school and walks purposely about when she should be sitting down. Is extremely shy, and cried for 15 minutes when I addressed her directly. It was impossible to test her intelligence except that she was able to recognise a few common objects in pictures; refused to make any effort to answer any questions. Mother stated that she would leave the roadway on hearing a motor-horn or a vehicle. Is aggressive and fond of teasing and hurting other children. Cranial circumference 17 inches. Microcephalic imbecile. Recommended for special residential school.

4. L. M., aged 14. Been at school for eight years and is in Standard II (lower division). Bodily and mental condition of mother and brothers and sisters good: father died of cancer. No noteworthy family history. Labour was very protracted at the child's birth. Mental deficiency said to have been first noticed at the age of 6 months. Began to walk when aged 3 years and to talk at the age of 4 years. First teeth

cut when 9 months old. Child has suffered from abscesses in ear and neck: an operation was necessary for the ear abscess, and the facial nerve was injured during this with the result that the child has facial paralysis on the right side. When cured of the two abscesses above named the child developed a further abscess in right hip joint and, as the result of that, the right leg is $1\frac{1}{8}$ inch shorter than the left. Is totally deaf in right ear and partially so in left ear. Speech and sight are good. Cranial circumference 22 inches. Face asymmetrical owing to paralysis. No stigmata. Execution of familiar complex movement good: attention, memory, judgment, general concepts all good. Writing only fair: reading about as good as that of a child of 8 years of age: description of models, pictures, familiar events, etc., fairly good. Manipulation of simple numbers and knowledge of simple money values fair. Attendance at school irregular. Classified as merely backward owing to infirmities, and transferred to Senior Department to devote almost all his time to manual work. Has done very well here, and takes a great pride in his work: is very attentive, industrious and obedient.

5. F: N., aged 10. At school for five years and is in Standard I. Father a chronic alcoholic and mother weakly and of low intelligence. Two brothers dead—one of "fits" and one of pneumonia. Father's father died in an asylum: no other noteworthy family history. Child commenced to walk when 12 months of age—to talk at 15 months: first teeth cut at 8 months of age. Parents decline to admit that boy is defective. Case brought to my knowledge by teacher reporting that boy had indecently exposed himself in a classroom: mother denied this and said exposure was due to defect in clothing, but, rather illogically, punished him for it.

School attendance officer reports that boy has been "before police" for stealing sweets from a shop, almost all of which he gave away to his playmates; also for breaking a shop-window, which he said he did because he was "dared" to do it by his comrades. Is frequently playing truant, and usually goes to a coal mine some distance from his home, where he tells the miners that he has had no breakfast or dinner, and obtains food from them: he is well fed at home, and his nutrition is above the average. He has a "cave" in a wood under the soil of which he buries old articles such as broken padlocks, odd nuts and bolts, a rusty and useless bicycle lamp, etc., obtained from no one knows where. Cranial circumference 21 inches. Vision, hearing, and speech good. Ideas of familiar objects, colours, etc., good. Knowledge of money values exceptionally good. Response usually ready, but sulky at times: memory fair, attention poor (gives one the impression that he could attend if he desired, but does not want to), imitation and self-control good. No stigmata: carriage erect and expression pleasing. Knows letters of alphabet but cannot spell words of three letters. Cannot do "3 times." Scrawls instead of writing. Is good at plasticene modelling, but immediately after he has modelled an object he will rub it up into a shapeless lump with evident delight in its destruction, and using quite unnecessary vigour, sometimes almost amounting to violence, in the process. Fond of teasing other children, but keeps a keen eye on teacher, and it is very difficult to detect him in this. Classified as a moral defective and recommended for observation under institutional treatment.

6. F. A., aged 18. Was at school from 5 years of age and was in Standard II when he left. Bodily and mental condition of parents good. Paternal uncle died

in asylum. Three brothers alive and in good bodily and mental condition. Began to walk at the age of 15 months and to talk at the age of 18 months. A typical hydrocephalic. Cranial circumference 25 inches. Expression fairly alert. Execution of simple familiar command good—of familiar complex order fair. Recognition of common objects, colours, shapes, etc., good. Reading slow but accurate. Has been in a special school for six years, and therefore knows very little about the outside world. Thinks London is about 80 miles away (it is really about 180), and says it would take a day to get there. Knows there are 12 inches in a foot, but says there are 36 feet in a yard. Asked how he would get a message sent very quickly to his father who lives in Ireland, says at first he would send a letter and “put it on the mail”: asked a quicker mode, says he would send it by a dispatch rider (obviously a notion suggested by the Great War): when a telegraph boy was suggested, he agreed and said that this boy would ride quickly with it for a certain distance and deliver it to another telegraph boy and that this process would go on till it got to Ireland: knew that it would have to go on a boat to get there. Is reported to be very good and industrious at joinery, on which he is employed at present: he described to me how he would proceed to construct a table, using many technical terms unfamiliar to me, but in the main his initiative, purpose, and concentration were apparent. Is not easily led, and when absurd answers to questions are suggested to him he thinks them well over and refuses to adopt them. Classed as a feeble-minded person of a fairly high-grade variety, and as one likely to work well under ordinary supervision, and recommended for trial in a joiners’ shop outside the institution and near his parents’ home.

7. F. A. B., aged 7. Bodily and mental condition of parents good. No family history of mental taint. An only child. Began to walk at the age of 4 and to talk at the age of 5: first teeth cut at the age of 9 months. Has a very pleasing and intelligent face. Had an accident (thrown out of perambulator) when 5 months old, and rather serious injury to head. Shortly afterwards began to have fits—most probably Jacksonian epilepsy. The fits persist but are very slight. Cannot talk properly, but her mother manages to understand what she wants. Has fits of "fidgets," when nothing will soothe her but gentle stroking of the legs and feet. Manages to let her mother know when the calls of nature need attention. Picks things to pieces, but quite innocently, and not with any really malicious destructiveness. Is a body-rocker; temperament usually quiet and apathetic, though at times somewhat querulous and restless. No apparent physical defect. Classed as epileptic imbecile, but admission to an institution where an operation could be performed for removal of pressure of brain recommended, this being the only chance of preserving the child from permanent imbecility.

8. H. N., aged 4. Father died of tuberculosis. Mother gave queer answers to many questions, and could not safely be classed as quite sane. One brother died of fits: two sisters bodily and mentally in good condition: father's father died in asylum: mother's father committed suicide. Mother uncertain of date of dentition in child. Child's speech is limited to "Mamma" and "Dada": makes other sounds which are quite unintelligible. Child cannot be taught to walk, though it can stand upright holding on to a support: progresses by crawling along the floor. Cannot dress or even feed itself: snatches food from the

baby. Saliva continually dribbles from its mouth. Has no control over bladder or rectum. When a fluffy toy is thrown at its face the child allows it to hit it time after time without any effort at warding it off, and continues to grin vacuously. Mother states her belief that child's condition is due to her having been chased by a pig during period of gestation and severely frightened. Child classed as idiot and institutional care recommended.

9. J. B., aged 20. Father died in gaol: mother a prostitute. Father's father died in asylum: no other noteworthy family history. Two sisters alive, one of whom is apparently mentally defective though earning 6s. per week as a cotton operative. Expression somewhat dull, though he occasionally brightens up. Has had no illness except whooping-cough. Attitude drooping—cannot stand erect for long. Says he can spell well, but spells "horse" "hot," "book" "bok," and makes no attempt to spell fish, bird, or cat. Fails when called on to read words of three letters, and says "to" spells "ox" and "on" "mat." No word- or letter-blindness present. Does not know the value of any coins except pennies and halfpennies: says there are thirty-six shillings in a sovereign, and four shillings in a half-sovereign. Says he has two toes on each foot, and that a square brick is round. Says he could walk 1,000 miles, and that it would take him about two hours to do it. Attention continually wandering and eyes roving about the room. Classed as feeble-minded—low-grade (probably of the "primarily neurotic" type) and recommended for further detention in the institution in which he then was being detained.

10. M. L., aged 12. Bodily and mental condition of parents apparently good: suspicion that both are intemperate. No family history of note. Two

sisters and a brother in good bodily and mental condition. Child began to walk at the age of 13 months and to talk at about the same age: first teeth cut at about 7 months. The only illness the child has had has been measles followed by broncho-pneumonia. Sight, hearing, smell, etc., normal. Mental deficiency first noticed at about 4 years of age, but parents not certain about this. No stigmata observable. Expression somewhat immobile. Cranial circumference $22\frac{1}{2}$ inches. Attention good: recognition of common objects, colours, shapes, etc., good. Memory, judgment of distances, similarity of objects, etc., fairly good. Can copy six-sided figures accurately, and is said to be good in cobbler's shop. Knows that his mother works in a clothing factory, but does not know anything that is made in factories except skirts. Says that leather comes from the "boot-shop" and, further pressed, says it comes from cows and horses. Can tell the time, but can't say what time it will be half an hour from now. Says the sun goes to Australia at night "because it would be selfish of us to have it all the time." Classified as feeble-minded—medium grade—and recommended for institutional treatment with special attention to manual training.

CHAPTER VIII

EDUCATION OF THE FEEBLE-MINDED

THE primary objects of the teaching should be to make the children so far as possible obedient, clean, and tidy in personal habits, thoughtful for others, observant, responsive, and generally able to take care of themselves and of their affairs, and to make them capable of supporting themselves so far as that can be done.

Seven years of age is, in my opinion, rather too old to begin to teach these children, and I would much prefer to have their education begin at, say, five years of age. Again, I think that after a child has been under education in the "three Rs" for sufficient time to enable the teacher to say that he is incapable of head-work, the teacher should be permitted to certify accordingly and the child should then be trained only in manual work. Most certainly should this course be taken when the child has been in the special school or class for a year or two, or is getting near the age of 14, when manual training begins to assume great importance in view of the child's future. And in every case I decidedly think that the last two years of each child's education in a special school or class should be almost entirely manual. The objection to so much manual work seems to be the risk of tiring the children, but surely there are variations enough possible, with so many forms of manual instruction available, to enable

a teacher to devise a curriculum which would not tire even delicate children or those of poor physique. Here is a list of forms of manual instruction taken from the Board of Education's Regulations for special schools and classes.

SUITABLE FORMS OF MANUAL INSTRUCTION

FOR DEFECTIVE AND EPILEPTIC CHILDREN

(a) Younger children

Bead threading
Drawing
Paper folding
Paper tearing
Paper cutting and mounting
Paper mat making
Clay modelling
Plasticine modelling
Macramé work
Netting and other string work
Kindergarten sewing
Wood strip work
Pith cane work

(b) Older boys

Drawing and design
Woodwork and carpentry
Tailoring
Shoe making and repairing
Cardboard modelling
Chair caning
Gardening and farm-work
Household employments
Mat and rug making
Répoussé
Bent-iron work
Printing
Baking
Basket work

FOR BLIND CHILDREN

(a) Younger children

Mat plaiting
Clay modelling
Bead threading
Bead design work
Lacing
Knotting, netting, and string-work
Rug and mat making
Pith cane work
Straw-plaiting.

(b) Older boys

Clay modelling
Basket work
Chair caning
Brush making
Coir mat making
Woodwork
Bent-iron work.

FOR DEFECTIVE AND EPILEPTIC
CHILDREN (*continued*)*(c) Older girls*

Cookery
Laundry-work
Housewifery
Needlework, plain and fancy
Knitting
Mending
Machine sewing
Drawing and design
Basket work
Chair caning
Gardening

FOR BLIND CHILDREN
(*continued*)*(c) Older girls*

Sloyd needlework
Needlework
Knitting
Mending
Chair caning
Basket work
Brush making.

“Forms of manual instruction suitable for defective and epileptic children are also suitable for deaf children, with the addition of dressmaking and corset making, lace making, and baking.

“Other forms of manual instruction may be suggested for approval.”

I entirely agree with Mrs. Hume Pinsent in her statement given before the Royal Commission, that “the education should be manual, with classes in the ‘three Rs’ *for those capable of benefiting by such classes.*”

As regards manual training, I think, as I have already indicated, having regard to the future of these children, that the instruction should be given with a more pronounced view to their future employment and maintenance—*i.e.* that it should be elementary industrial training. Unless permanently detained in an institution under the powers of the Mental Deficiency Act, 1913, the defective child has to take his place in the world after he attains the age of 16, and there are not always After-Care Committees to keep an eye on him.

Amongst the forms of manual instruction there are many things—*e.g.* cobbling, tailoring, dressmaking, gardening, laundry-work, lace making, hand-loom weaving,

rug making, chair caning, etc., etc., which qualify the child for subsequent employment up to a point which may mean that he may be able to provide his own food and clothing; and, with so many calls on the public purse, this is well worth considering.

EDUCATIONAL TREATMENT

I enter on this phase of the subject with some trepidation. I have specialised, owing to necessity (by reason of having for many years to lay scientific problems before lay committees) in the art of interpreting medical "lingo" into everyday language, but still the diffidence persists. I have, however, no special skill in pedagogy, and I must ask you to forgive elemental errors. I can only offer you suggestions and ideas based on physiological knowledge of developmental laws, and I must leave the practical interpretation very largely to you. No doubt you will improve on my imperfect proposals.

I can only tell you that I have not only drawn on my own experience, but on that of many others with more specialised experience than my own—medical officers of large institutions, matrons, special school teachers, members of After-Care Committees, and others who have given evidence before the two Royal Commissions, and who in other ways have given the public the benefit of their special methods.

You must not, therefore, take what I say to you to be the "be-all and the end-all" of the possibilities of these defective children: rather would I that you took them as the starting-points of the education of the mentally deficient, and, working on the physiological basis that I have so strongly impressed on you, evolve further and better methods for getting the best out of these sadly handicapped members of society.

In the first place it is, in many cases, necessary to arouse some kind of interest in the child—it is sometimes necessary to stimulate it even to play. This is usually done by some kind of romping game, "which is gradually replaced by more definite games and then by orderly drill and calisthenics" (Tredgold). This helps the child in its lessons of response, obedience, and attention, and, to a smaller extent, in concentration and self-control.

"The general principles of education do not differ from those in the case of the mentally normal, the difference being merely one of method and application. Above all, it is necessary to remember that these children's conception of the *abstract* is extremely limited, that everything must be presented to them in the *concrete*, and that they will learn far more with their hands than with their heads" (Tredgold).

Attention is the most difficult thing of all to train, and yet no education can hope to be at all effective unless this faculty is evolved up to a certain point. Here there are two types of defect to consider—the restless, excitable type who can settle down to nothing at all, and the inert type who almost need volcanoes to move them. The child who is attracted by *nothing* after several elementary trials may probably be given up as hopeless and consigned to an idiot establishment. The most hopeful line on which to embark in order to develop this power of attention is to find out first of all in what particular thing the pupil has an interest—it does not matter what it is, this must be taken as the starting-point: it may be animals, flowers, dolls, railway engines, playing with a pencil, etc. The next step is to find new matter *arising out of or closely allied to this subject in which there is some interest displayed*; and here your imagination and initiative will have ample

scope, and you will meet with many disappointments arising out of quite pardonable misconception or misjudgment. Proceeding onwards from this new line, you must create an artificial interest for such tertiary subjects, again as closely related to the second series of subjects as possible, as are not really interesting in themselves but which must be *made interesting* by a system of small rewards and by much encouragement.

TACTILE AND MOTOR SENSE EDUCATION

"The cultivation of the tactile and muscle senses is particularly called for in the case of mentally defective children since, in addition to their general educational value, these are functions which are absolutely essential for the proper performance of manual occupations, and the future of these children must depend to a very great extent upon how they can use their hands" (Tredgold).

Muscular sensations "arise in two ways—1st, when a muscle or a series of muscles is moved or contracted; 2nd, during the tension of a muscle. Generally speaking, impressions arising during muscular contractions are of use in appreciating size or distance, whilst those coming from muscular tension tell us of weight. In training it will usually be found advantageous for the pupil's eyes to be kept closed during these exercises" (*loc. cit.*).

One excellent plan of combining visual with muscular sense training is to get the pupil to measure off with a rule on a sheet of paper a series of prescribed distances—say from $\frac{1}{2}$ to 4 or 5 inches. When this has sunk in, the children are asked to draw lines of a prescribed length without using the rule—of course keeping to the range of distances already taught.

Generally speaking, kindergarten methods are adopted

for this particular sense education—plaiting thick strands of differently coloured wool hung up on hooks on the wall, so that the child has to lift up his head and arms to get at them: learning to lace boots and to button buttons; weaving paper into patterns, fitting differently shaped pieces of wood into correspondingly shaped holes, fitting pegs into holes, elementary picture-puzzle-making, shop lessons with paper money, etc.

Athetosis (i.e. almost incessant squirming movements of the fingers) is best treated by special finger exercises, such as perforation of pictures, the use of the peg-board (fitting pegs into a perforated board so as to make simple patterns), threading coloured beads and buttons, sticking pins into a spotted pincushion, the use of the size and form board, and so on.

X If tactile sensation be morbidly hypersensitive, so that it actually hurts the child to touch rough surfaces, a gradual education in coarse work must be given—coarse softish material such as rough canvas being used for a beginning, and the child being gradually accustomed to rougher stuff until he can handle sand-paper, rough stone-work, etc., without shrinking.

Tactile sensation is also taught by the child dipping into a large bag containing rough and smooth balls or cubes, pieces of different cloth (silk, wool, etc.), toy animals, bricks, etc., etc., and the child names the articles *without seeing them*.

\ The *motor sense* may have to be stimulated at first by bombardment with flannel bags filled with sawdust or similar material: self-protection is soon called into action, and later you will find that the child will assume the offensive. The child must be made to join in the romping or drilling or dancing of the class. When he has been educated to *move*, the teacher can then tackle the difficult question of co-ordination of movement.

Here we must go on physiological lines and be guided very largely by the size of the muscles we wish to control. Obviously two or three large muscles with large work to accomplish are more easily co-ordinated than eight or ten small muscles such as those concerned in the movements of the fingers. First of all, the muscles concerned in standing, walking, and pushing are to be educated—as, for example, by walking between the rungs of a ladder placed flat on the ground, by such games as hop-scotch, by marching in between irregularly placed obstacles, and so on. Later, musical drill, games like football and rounders, the use of dumb-bells, and simple breathing exercises may be tried. Finally, such things as drawing, free-arm drawing, clay modelling, paper folding, paper cutting, or paper tearing may be tried. In the exercise of the muscles control and co-ordination have to be taught. In bad cases proper walking may have to be taught by one person leading the child by the hand whilst another puts the feet in the proper positions from behind. Feeding and dressing have sometimes to be taught in a similar fashion.

CORRECTION OF SPEECH DEFECTS

Tongue and lip gymnastics are very useful where elementary speech is bad. Opening and closing the mouth, bringing the teeth together, putting out the tongue and turning it from left to right, touching the roof of the mouth and the upper and then the lower teeth with it, holding the lips together over a pencil or a bone ring, whistling, saying “prunes and prisms,” etc., are all useful in this connection. Useful starts with speech can often be made by asking the child to imitate the sounds of animals—the “moo” of the cow, the “miaou” of the cat, the “bow-wow” of the dog,

the "baa" of the sheep, etc. Dr. Wyllie's book on the *Disorders of Speech* is a very valuable treatise. For cases advanced enough to learn reading adopt the method now almost universal, I believe, in public elementary schools—what I call the "block" system, but which is also called the "word-method" system—where reading is taught by words and syllables without drudging through the letters of the alphabet. Letters can be learned later by the aid of such games as word-making and word-taking.

Writing follows speech and reading almost naturally, and the first steps are those of making inclined strokes on a ruled slate. Following pictures or elementary drawings lying under a faintly frosted glass is often a very useful assistance to writing. Sometimes the teacher has to guide the feeble hand for weeks in following lines inclined at various angles. The only hopeless cases are those where the child, after repeated instruction and guidance, gradually drifts off into a meaningless scribble. These cases you may give up as ineducable.

TRAINING OF SPECIAL SENSES

The pupil's special senses may be educated in various manners. For the education of the sense of *smell* wide-mouthed bottles containing such things as peppermint, lavender, onions, mustard, cloves, ground coffee, etc., are offered to the child's nostrils *whilst he is blindfolded*. For *taste* education similar methods are used—bottles with sugar, salt, ginger, starch-powder containing a trace of quinine, flour, cinnamon, etc., are employed, and the blindfolded child is given a tiny taste in a spoon, which is afterwards washed.

Hearing is educated by means of rattles, whistles,

bells with different notes, cymbals, drums, etc., the child again being blindfolded. Hearing in those who are not really deaf, but only defective in attention and concentration, is best developed by singing, musical drill, and even by the use of the gramophone and the mouth-organ. You will find that in most cases the *time* of the music is learned first and the *notes* much later.

In connection with hearing remember the possible existence of *tone-deafness*, usually exemplified by the inability to hear low-pitched sounds. In such cases shrill sounds should be used. Those of you who live in factory towns know how easily after a while operatives can converse amidst the din of machinery by adopting a pitch or tone for their voices which is different from the tone of the machinery noise.

In the training of *vision* it is important in low-grade cases that the movements of the eyeball be trained—the child should have its head fixed by a contrivance similar to that used by photographers, and then made to move its eyeballs to left, to right, and up and down for a few minutes. After a few lessons of this description the child may be tried without the head-rest. This training is of importance because the range of vision determines to some extent the child's opportunities of gaining knowledge and of assimilating his surroundings.

In the teaching of *colours* train first the perception of colours and do not bother about the names of the colours: just give the child a coloured article and ask it to find others of a similar colour. After a while the *names* of colours may be gradually taught.

Judgment and reasoning are perhaps the most difficult of all things to teach. Object-lessons and pantomime using the scholars as actors are the two best methods to adopt. The value of object-lessons consists not so

much in the *matter* as in the *manner* in which the teacher presents them to the children. Again, the simplest and best manner in which to educate the child is to find out the matter in which the child is naturally interested and to weave your questions and answers round that, using models which the child can handle and see as far as possible.

Pantomime is often excellent in its results, but often wants some apparatus which should not usually be difficult to improvise. A robber, a person to be robbed, and a policeman are usually favourites, and the scenario can be developed to almost any extent. Questions should be asked frequently as to the why and wherefore of certain actions and their possible consequences, and as much as possible should be left to the initiative of the actors, and any *reasonable* diversion from the programme sanctioned with acclamation.

GENERAL

It is universally agreed that physiological education of the senses must precede the psychical education of the mind.

Remember that work and exercises demanding much energy but little skill are called for in the lower-grade case. Never let anything be learned off "parrot-fashion" unless it is also understood. In training the feeble-minded the old teacher's maxim for all bad habits requiring correction has a very special application—I refer to the maxim "Don't say 'don't,' say 'do.' " In other words, replace the bad habits by the corresponding good or proper one instead of merely trying to wipe out the bad habit and leaving the child to fill in the blank. This is the same dodge as one uses with infants

when one wants to get an article from them—give them another object to take its place.

Tendencies to the dribbling of saliva are best combated by holding a pencil crosswise between the lips (not the teeth) or blowing trumpets or whistles.

PUNISHMENT

This is a most difficult thing to pass an opinion on. Punishment *must* be meted out for offences against decency, for wilful destruction or misappropriation of property, for cruelty against others, and for serious and repeated breaches of discipline. But in deciding on the degree of the punishment to be inflicted, let me ask you to take into very careful consideration the *mental and not the physical age of the child*, and punish it according to the *mental* age. I do not think you will find punishment often, if at all, necessary for small breaches of discipline or order, and certainly it will not be needed for failures in accomplishment of work. Corporal punishment, if inflicted at all (and there will be found cases where the child knows and actually expects such punishment to follow on certain misdeeds and will be almost disappointed if it is not given) must be given with a proper appreciation of what I have several times insisted upon—the low vitality which is common in mentally defective children.

Punishment is recognised by implication in the case of the moral imbecile in the Mental Deficiency Act, for in the definition of such cases you will find words to the effect that punishment of the wrong-doing has had no deterrent effect on the child's misdeeds. As regards the form of corporal punishment I do not think it should ever be implemental—*i.e.* you need not call in to your aid the cane or the ruler—the flat hand is

quite a forcible enough weapon to employ. Hitting on the head is, of course, a dangerous thing in all such cases, and "boxing the ears" is not permissible.

THE OUTLOOK

I cannot help thinking that there is a tendency to overestimate the possibilities of education in the cases we have been considering. However elaborate our methods, we are only going to be able to return a very small percentage of these mentally defective children to the world in a normal condition. It is impossible to give a definite forecast in most cases, but a consideration of the form or variety of defect and its degree will enable a *reasonably* accurate estimate to be formed of the prognosis. Let me remind you again not to be misled by the child's personal appearance—the deformed, stunted, and ugly-looking children are often more amenable to education than the well-grown and comely children. The explanation of this fact is that in the good-looking children the causation of the mental defect is generally *accidental* injury or disease which has destroyed a portion of the brain: in the ugly children the cause of the defect is usually mal-development or incomplete development without the presence of actual disease.

Microcephalics usually improve considerably, especially in manual work, but will always be defective in thought and initiative, and their mental capacity will, as a rule, remain at a low level. **Mongolians** are deceptive: their appearance is often keen and vivacious, and great things are therefore expected of them. Mild cases may be trained so that they may almost "come to pass muster with their brothers and sisters, but they will always require some one to manage their affairs"

(Tredgold). Their outlook is, roughly speaking, "directly proportionate to the intensity of the bodily signs" (*loc. cit.*).

Paralytic Cases (not juvenile general paralysis of the insane) can usually be taught the "three Rs," and to do mechanical work well, but there is usually "a little childishness, a want of judgment regarding the affairs of life, and an inability to make headway against competition" (*loc. cit.*). Remember that some paralytic cases appear mentally defective because their crippled condition has prevented their attendance at school. Paralysis of a progressive nature or with epileptic or convulsive seizures has always a serious outlook.

Epilepsy causing mental deficiency has a bad prognosis, and the cases will usually end in lunacy. Epilepsy occurring as a complication, but not as the cause of mental defect, is also unfavourable, and education is very difficult.

Hydrocephalus, if progressive, and if pressure symptoms come on or increase, has a poor outlook. Where the condition is arrested the outlook is good, and suitable education will produce very good results.

In **Syphilitic** cases the tendency to general paralysis makes the prognosis very gloomy.

In **Cretinism** all depends on the age at which medical treatment was begun, and on the extent to which it has been persevered with. In well-treated cases the patients may be developed to such an extent that mental deficiency may not be discovered except under very close scrutiny.

It is safe to say that permanent lifelong control is universally agreed as essential to prevent this sadly placed section of the community from becoming a danger alike to the public and to themselves. Fortunately the Mental Deficiency Act, 1913, and the Ele-

mentary Education (Defective and Epileptic Children) Act of 1914 render this now practicable. From the utilitarian and humanitarian point of view the outlook is not quite so hopeless as many would have us believe.

Séguin, who is practically speaking the father of all schemes for the advancement of mentally deficient children, writes after thirty years' experience of this special work as follows :

" Idiots have been improved, educated, and even cured ; not one in a thousand has been entirely refractory to treatment ; not one in a hundred who has not been made more happy and healthy. More than 30 per cent. have been taught to conform to moral and social law, and rendered capable of order, of good feeling, and of working like the third of a man ; more than 40 per cent. have become capable of the ordinary transactions of life under friendly control, of understanding moral and social abstractions, or working like two-thirds of a man ; and 25 to 30 per cent. have come nearer and nearer the standard of manhood, till some of them will defy the scrutiny of good judges when compared with ordinary young men and women."

The statistics of the Royal Albert Asylum, Lancaster, with regard to the after career of youthful idiots and imbeciles discharged on the completion of seven years' training, show as follows : 10 per cent. earning wages ; 5 per cent. remuneratively employed at home ; 3·5 per cent. capable of earning wages if suitable situations could be found ; 22 per cent. useful to their friends at home ; 22 per cent. of little or no use ; 29 per cent. finished up in the workhouses and lunatic asylums ; the remaining 8·5 per cent. had died.

The American experience is that from 20 to 30 per cent. of the pupils trained in institutions for the feeble-minded are discharged as absolutely self-supporting—

i.e. they can go out into the community, secure and retain a situation and spend their earnings prudently. Over 50 per cent. of the higher-grade adults who have been trained for a considerable time are capable under intelligent supervision of doing a sufficient amount of work to pay for the actual cost of the support, whether in an institution or at home.

These represent the positive gains; but there are negative gains which in some respects outweigh them. Amongst these negative gains are the curing of uncleanness, immorality, mischievous and possible criminal propensities, the prevention of the making of drunkards and prostitutes, and the prevention of the perpetuation of the unfit.

CHAPTER IX

THE DEFECTIVE AND EPILEPTIC CHILDREN ACT, 1914, AND THE REGULATIONS OF THE BOARD OF EDUCATION ON SPECIAL SCHOOLS AND SPECIAL CLASSES

THE chief provision of this Act is contained in its first section; and, put briefly, it means that it is now compulsory on the Local Education Authority to make provision for the education of mentally defective children whose age exceeds seven years. This provision may be made in one or more of three ways:

1. By classes in public elementary schools certified by the Board of Education as Special Classes:
2. By boarding the children out in houses conveniently near to any special class or school, subject to the Regulations of the Board of Education:
3. By establishing schools to be certified by the Board of Education, or by contributing towards the maintenance, etc., of schools already certified.

The Local Education Authority are not obliged to provide for the boarding out of a mentally defective child unless the Board of Education are satisfied on the medical evidence, and after consultation with the Education Authority, that the child's education cannot be suitably secured in any other way. Any case of doubt as to whether a child is or is not mentally defective is to be decided by the Board of Education.

Before deciding the provision to be made for the education of a mentally defective child, the Local Education Authority are to "endeavour to ascertain the wishes of the parents of the child, and shall, so far as possible, give effect to their wishes."

After consultation with the parents of a mentally defective child over the age of 7 years the Local Education Authority may be satisfied that proper provision is not being made for its education: they may thereupon require the parent to send the child to a certified class or school suitable for it, and in case of non-compliance with their requirement may obtain an Order from a Court of Summary Jurisdiction for the sending of the child to a suitable school or class. There are certain provisos to this section, but they merely affect procedure, consent of parent unreasonably withheld, etc. The parent is given the power to withdraw his child from school on satisfying the Education Authority that he will provide suitably for the child's education in some other way.

SPECIAL SCHOOLS

Amongst the Board of Education requirements for special schools are the following, which are set out in the Board's Regulations for such schools, dated September 1st, 1909 (Appendix II). These regulations so far as they deal with *grant* are superseded by a Minute of the Board of Education dated February 3rd, 1915.

BUILDING RULES FOR SCHOOLS FOR BLIND, DEAF,
DEFECTIVE, AND EPILEPTIC CHILDREN

(N.B.—These rules must be read in conjunction with the Building Regulations for Public Elementary Schools.)

General Rules

1. (a) Schools for various types of afflicted children should not be held in the same building, unless structurally separated for each type.

(b) All rooms for physically defective children must be on the ground floor.

(c) In institutions and colonies for boarding and lodging afflicted adults as well as children, the whole of the school premises should be structurally separated from the adult accommodation.

Playgrounds

2. Where no field or other larger space has been secured, the superficial area of the site should provide not less than 30 square feet per child of open space exclusive of buildings. The playgrounds for boys and girls should be separate, except in schools for physically defectives where the offices are inside the school. There should be a large covered shed open on one side, provided with ample top light, which, under supervision, may be used by boys and girls together.

Class-rooms

3. (a) Not less than 15 square feet of floor-space per child in average attendance must be provided, except in the case of schools for physically defective children, when 18 square feet per child will be required.

(b) No class-room should contain less than 300, or in

the case of schools for physically defective children, *360 square feet of floor-space.*

(c) The light should be ample and such as to suit the mode of teaching employed. In schools for blind and deaf children the scholars should, as a rule, be arranged in a semicircle round the teacher, and the light should be arranged so as to enable the teacher to see, in the case of the blind, every change of facial expression, and so that, in the case of the deaf, the teacher and scholars may observe closely the action of the lips.

(d) In day schools there should be a wide and well-lighted corridor or hall, and a room for the use of the teachers. Accommodation should be arranged for medical inspection.

(e) Each child must, as a rule, be provided with a single desk of suitable size, and, except in blind schools, sloped at an angle of from 10 to 15 degrees.

(f) Suitable rooms or accommodation must be provided for manual instruction. Such rooms, if suitably arranged, may be reckoned in the accommodation.

4. All playgrounds, offices, cloak-rooms, lavatories, entrances, and passages must be so constructed as to admit of easy supervision by the teachers of the school, and must, as a rule, be kept for the sole use of the children attending that school. Except in schools for physically defective children *separate entrances, playgrounds, and offices should be provided for boys and girls.*

RULES APPLICABLE TO BOARDING-SCHOOLS AND HOMES

Dormitories

5. (a) The minimum width should be 16 ft., the minimum area should be 50 square feet per child, and

the minimum cubic capacity 500 cubic feet per child. A separate bed must be provided for each child, with sufficient space between the beds. Cross ventilation must be provided where possible.

(b) Adequate means of supervision must be provided in a dormitory; this may be secured by means of a window in the bedroom of the officer in charge. In houses, or homes, having small bedrooms, the officer's bedroom should be closely adjoining on the same floor.

(c) No boys over 9 years of age should be lodged with girls, unless in a distinct wing approached by a separate staircase. Boys under 9 years of age may be housed in the same buildings with girls, but must have separate dormitories. Each supervising officer should have a separate bedroom.

(d) Adequate provision should be made for storing clothes and household materials, and each child should have a locker or box wherein to keep his own property.

Dining-rooms

6. (a) These should be of sufficient size to seat each child comfortably, with space for the passage of waiters. The minimum area is 10 square feet per child.

(b) A room for joint use as a play-room and dining-room should have an area of not less than 25 square feet per child, and provision should be made to separate at meal-times the part used for a dining-room.

Play-rooms

7. These should be of at least the same size as the schoolrooms.

Sick-rooms

8. (a) These should be separate for boys and girls, and should consist of two rooms at least in each case,

viz., one for the patients and the other for the nurse. An aspect south-east, south, or south-west is to be preferred. A closet and bathroom should be provided in close connection with the sick-room. These rooms should be so arranged that they can be isolated from the rest of the building in order to meet cases of suspected infectious disease pending its determination and removal to hospital or sanatorium.

(b) A detached building is also necessary for infectious cases, except in the neighbourhood of a hospital to which cases can be readily conveyed.

Baths and Lavatories

9. These should be supplied with hot and cold water, and should be of sufficient number to enable each child to obtain a bath at least once a week in winter and twice in summer. Lavatory basins should be sufficient to enable each child to wash the hands, face, and upper portion of the body morning and evening. The water supply should be sufficient to admit of fresh water for each child. There should be provision in the bathrooms and lavatories for a separate towel for each child.

Latrines

10. *For day.*—The provision of closets should be 10 per cent. on the number of boys, together with a urinal; and 15 per cent. on the number of girls, with facility for frequent supervision.

For night.—One or two closets should be provided adjoining the dormitories, but disconnected therefrom by a lobby having a current of air by windows on two sides.

Staircases and Corridors

11. These must be fireproof. Alternative exits from all rooms not situated on a ground floor must be provided for use in case of fire.

You will note that all these regulations are to be read in conjunction with the Board's Building Regulations, 1907 (Cd. 3571, obtainable from any Government publisher, price 2d.).

Under Circular 432 (Revised), dated November 1st, 1904, the examination of children for admission to a special day school or class must be carried out by the Medical Officer of the Local Education Authority. The teacher who has most recently had charge of the child should be present at the examination, and the parent of the child should be given an opportunity of being present. Similar opportunity should be given to His Majesty's Inspector and to the teacher of any certified special school or class if there be one in the neighbourhood. The parent is bound to cause the child to attend the examination under a penalty of £5.

The Local Education Authority establishing special schools must conform to certain regulations as to the management of such schools. They must arrange for children to be admitted by the procedure just described: the children must be periodically examined by the Medical Officer: the premises must be suitably furnished and used exclusively for these special children: the school or class must have special teachers, the principal teacher being a Certificated teacher or one holding the Higher Certificate of the National Froebel Union: special managers are to be appointed: a special time-table is to be prepared showing not less than six hours a week of suitable manual instruction as a rule, though more time may be given to this work in the

case of individual children. The mentally defective children are not to be mixed with other children for any lessons. The Local Education Authority may provide guides or conveyances for children who cannot attend school without such assistance. Attendance may be compelled where the school or class is within reasonable reach of the child's home.

For epileptic children the Board will only sanction small boarding-schools where proper provision is made for the medical attendance as well as for the education of children whose epilepsy is so severe or so frequent or so disturbing to other children as to prevent them from attending special day-schools. Mild or infrequent cases of epilepsy may be able to attend ordinary public elementary schools or special classes for defectives.

Special Classes

A class should not be more than twenty in number: children of opposite sexes over twelve years of age should not be taught in the same class: a special room (not a curtained-off area or a mere special portion of a large room used at the same time for other classes), a specially qualified teacher and a certain amount of special apparatus will be required. For single classes it is likely that the Board of Education would require two teachers or a teacher and a manual instructor. Special apparatus would include such things as models to train the children in sight, colour, form, smell, hearing, and touch, in elementary kindergarten work, and in knitting, sewing, rug-making, basket-making, cookery, laundry-work, tailoring, shoe-making, brush-making, gardening, etc., etc. Guides or conveyances may be needed for getting the children to and from school. The teachers appointed would, I think, have to be paid on the scale of special-subject teachers.

The Regulations governing such schools and classes are those made by the Board of Education in September 1909, as modified by Minutes dated June 27th, 1910, July 17th, 1914, and February 3rd, 1915.

The Board of Education do not care for special classes to be held at existing schools where there is a possibility of the defective children mixing with the normal ones; and they would not be likely to approve a special class unless the room set apart for it were effectively separated from the other rooms and had separate lavatory and W.C. accommodation.

The cost for each special class, leaving out expenses general to all schools (caretaking, cleaning, heating, lighting, etc.), and expenses of guides or conveyances, would be approximately £250 per class per annum. The grant payable each year for a certified school or class for defective or epileptic children is at the rate of £6 for each unit of average attendance (Minute, dated July 17th, 1914, Article 25).

CURRICULUM

The Regulations of September 1st, 1909, Chapter 3, give the curriculum for a school for mentally defective children. The subjects to be taught are:

English Language, including speaking with clear articulation and enunciation, reading, writing, and recitation.

Arithmetic, including mental arithmetic and practical knowledge of money, weights, and measures.

Knowledge of common things, including Nature Study and observation lessons.

Drawing.

Singing, including training in proper breathing.

Physical exercises.

Plain needlework (for girls).

Manual instruction.

In special schools for epileptics composition, the study of literary matter and geography are to be taught in addition to the above.

It must be borne in mind that when the children for whom educational provision may be made attain the age of 16 years, the Education Committee's responsibility ceases and that of the Mental Deficiency Act Committee commences. Therefore—it almost follows—any *residential* school which may be established for such children should be established in conjunction with any institution for the care of the older mentally defective person. The erection and administration of two such institutions, if they were established side by side, could be carried out with considerable economy to both parties concerned, and it would be no difficult matter to apportion expenditure. It would be possible, for example, for one Superintendent to supervise both establishments, for several special-subject teachers to give time to both establishments for the purpose of teaching manual work, for the same sick ward and isolation block to serve both, for the same administrative block to serve both, whilst such things as water-supply, drainage and sewage disposal, roads, etc., etc., could be carried out with considerable economy. It would be well, therefore, to arrange for a conference to be held between representatives of any Education Committee and of the Mental Deficiency Act Committee concerned before any steps are taken in the matter.

The grant payable by the Board of Education in respect of Certified Boarding-schools for mentally defective children is "one-half of the expenditure of the Local Education Authority on the maintenance of the school," including the cost "of educating, boarding and

lodging, and medically attending and treating the children, together with one-half of the cost to the Authority of conveying the children to and from the school *and one-half of any expenditure out of income by the Authority by way of interest on, or payment of, capital raised, or by way of rent or other similar payment for the purposes of the provision of the school.*" (Minutes of February 3rd, 1915, Article 26 (b).) (The italics are my own.)

The great advantage of special schools is that they permit of the classification or grading of the children according to mental capacity, though, of course, this cannot be done nearly so well as in the large residential institutions. The larger the special school, of course, the better the possibilities of classification. There are several authorities who are agreed that, even under special school tuition, it is impossible to say before the age of 11 or 12 years (*i.e.* after 4 or 5 years' careful observation) whether a child will be able to earn its own living without control and supervision, and that if an opinion be ventured without such extended experience it is more than probable that somewhat serious mistakes will be made.

Of the total number of defective children who pass through special schools "about 1 per cent. can be turned out to earn their own livelihood in a separate existence in the outside world" (Dr. Caldecott, Earlswood Asylum).

APPENDIX

LEGISLATION ON THE SUBJECT OF MENTAL DEFICIENCY IN SCHOOL CHILDREN *

MENTAL DEFICIENCY ACT, 1913

SECTION I

Definition of defectives.—The following classes of persons who are mentally defective shall be deemed to be defectives within the meaning of this Act :—

Idiots ; that is to say, persons so deeply defective in mind from birth or from an early age as to be unable to guard themselves against common physical dangers ;

Imbeciles ; that is to say, persons in whose case there exists from birth or from an early age mental defectiveness not amounting to idiocy, yet so pronounced that they are incapable of managing themselves or their affairs, or, in the case of children, of being taught to do so ;

Feeble-minded persons ; that is to say, persons in whose case there exists from birth or from an early age mental defectiveness not amounting to imbecility, yet so pronounced that they require care, supervision, and control for their own protection or for the protection of others, or, in the case of children, that they by reason of such defectiveness appear to be permanently incapable of receiving proper benefit from the instruction in ordinary schools ;

Moral imbeciles ; that is to say, persons who from an early age display some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect.

* The Memoranda and Regulations are reprinted from the originals with the permission of the Controller of H.M. Stationery Office.

SECTION 2

Circumstances rendering defectives subject to be dealt with.—A person who is a defective may be dealt with under this Act by being sent to and placed in an institution for defectives or placed under guardianship . . . if in addition to being a defective he is a person in whose case such notice has been given by the local education authority as is hereinafter in this section mentioned.

Notice shall, subject to regulations made by the Board of Education, to be laid before Parliament as hereinafter provided, be given by the local education authority to the local authority under this Act in the case of all defective children under the age of seven (*a*) who have been ascertained to be incapable by reason of mental defect of receiving benefit or further benefit in a special school or class without detriment to the interests of the other children, or as respects whom the Board of Education certify that there are special circumstances which render it desirable that they should be dealt with under this Act by way of supervision or guardianship ; (*b*) who on or before attaining the age of sixteen are about to be withdrawn or discharged from a special school or class, and in whose case the local education authority are of the opinion that it would be to their benefit that they should be sent to an institution or placed under guardianship.

SECTION 31

Duties of Local Education Authorities.—(1) The duties of a local education authority shall include a duty to make arrangements, subject to the approval of the Board of Education, (*a*) for ascertaining what children within their area are defective children within the meaning of this Act ; (*b*) for ascertaining which of such children are incapable by reason of mental defect of receiving benefit or further benefit from instruction in special schools or classes ; (*c*) for notifying to the local authority under this Act the names and addresses of defective children with

respect to whom it is the duty of the local education authority to give notice under the provisions hereinbefore contained.

In case of doubt as to whether a child is or is not capable of receiving such benefit as aforesaid, or whether the retention of a child in a special school or class would be detrimental to the interests of the other children, the matter should be determined by the Board of Education.

(2) The provisions of section one of the Elementary Education (Defective and Epileptic Children) Act, 1899, shall apply with the necessary modifications for the purpose of this section.

SECTION 30 (iv)

Nothing in this Act shall affect the duties or powers of local education authorities under the Education Acts; and the duty of ascertaining what children over the age of seven and under the age of sixteen (hereinafter referred to as defective children) are defectives shall rest with the local education authority as hereinafter provided and not with the local authority under this Act; and such last-mentioned authorities shall have no duties as respects defective children, except those whose names and addresses have been notified to them by the local education authority under the provisions of this Act.

SECTION 8

Procedure in cases of persons guilty of offences, etc.—(1) On the conviction by a court of competent jurisdiction of any person of any criminal offence punishable in the case of an adult with penal servitude or imprisonment, or on a child brought before a Court under section 58 of the Children Act, 1908, being found liable to be sent to an industrial school, the Court, if satisfied on medical evidence that he is a defective within the meaning of this Act, may either—(a) postpone passing sentence or making an order for committal to an industrial school, and direct that a

petition be presented to a judicial authority under this Act with a view to obtaining an order that he be sent to an institution or placed under guardianship; or (b) in lieu of passing sentence or making an order for committal to an industrial school, itself make any order which if a petition had been duly presented under this Act the judicial authority might have made, which order shall have the like effect as if it had been made by a judicial authority on a petition under this Act: Provided that, if the Court is a Court of summary jurisdiction and the case is one which the Court has power to deal with summarily, the Court, if it finds that the charge is proved, may give such directions or make such order as aforesaid without proceeding to a conviction, and such a person shall for the purposes of this Act be deemed to be a person found guilty of an offence. (2) The Court may act either on the evidence given during the trial or other proceedings, or may call for further medical or other evidence. (3) Where the Court so directs a petition to be presented against a person, it may order him to be detained in an institution for defectives or in a place of safety for such time as is required for the presentation of the petition and the adjudication thereof. (4) Where it appears to any Court of summary jurisdiction by which a person charged with an offence is remanded or committed for trial that such person is a defective, the Court may order that pending the further hearing or trial he shall be detained in an institution for defectives, or be placed under the guardianship of any person on that person entering into a recognisance for his appearance. (5) Where it appears to the police authority that any person charged with an offence is a defective, they shall communicate with the local authority, and it shall be the duty of the police authority to bring before the Court such evidence as to his mental condition as may be available: Provided that, where it is intended to bring such evidence before the Court, the police authority shall give notice of the intention to the person charged, and to his parent or guardian, if known.

SECTION 9

Procedure in case of defectives undergoing imprisonment.—

Where the Secretary of State is satisfied from the certificate of two duly qualified medical practitioners that any person who is undergoing imprisonment (except imprisonment under civil process) or penal servitude, or is undergoing detention in a place of detention by order of a Court or in a reformatory or industrial school or in an inebriate reformatory, or who is detained in a criminal lunatic asylum, is a defective, the Secretary of State may order that he be transferred therefrom and sent to an institution for defectives, the managers of which are willing to receive him, or that he be placed under guardianship, and any order so made shall have the like effect as if it had been made by a judicial authority on petition under this Act.

ELEMENTARY EDUCATION (DEFECTIVE AND EPILEPTIC CHILDREN) ACT, 1899

1. (1) A school authority, as defined by the Elementary Education (Blind and Deaf Children) Act, 1893, may, with the approval of the Education Department, make such arrangements as they think fit for ascertaining—

(a) what children in their district, not being imbecile, and not being merely dull or backward, are defective, that is to say, what children by reason of mental or physical defect are incapable of receiving proper benefit from the instruction in the ordinary public elementary schools, but are not incapable by reason of such defect of receiving benefit from instruction in such special classes or schools as are in this Act mentioned ; and

(b) what children in their district are epileptic children, that is to say, what children, not being idiots or imbeciles, are unfit by reason of severe epilepsy to attend the ordinary public elementary schools.

(2) The school authority, in making their arrangements under this section, shall provide facilities for enabling any

parent, who is of opinion that his child ought to be dealt with under this Act, to present such child to the school authority to be examined, although he may not have been required so to do by that authority; and any school authority failing to provide such facilities shall be deemed to have acted in contravention of this Act.

(3) For the purpose of ascertaining whether a child is defective or epileptic within the meaning of this section, a certificate to that effect by a duly qualified practitioner approved by the Education Department shall be required in each case. The certificate shall be in such form as may be prescribed by the Education Department. *See also section 6 of Act of 1914 (p. 112).*

(4) For the purpose of the exercise of the powers conferred by this section, it shall be the duty of the parent of any child who may be required by the school authority to be examined to cause the child to attend such examination, and any parent who fails to comply with such requirement shall be liable on summary conviction to a fine not exceeding five pounds.

2. (1) Where a school authority have ascertained that there are in their district defective children, they may* make provision for the education of such children by all or any of the following means:—

(a) by classes in public elementary schools certified by the Education Department as special classes; or

(b) by boarding out, subject to the regulations of the Education Department, any such child in a house conveniently near to a certified special class or school; or

(c) by establishing schools, certified by the Education Department, for defective children.

(2) Where a school authority have ascertained that there are in their district epileptic children, they may make provision for the education of such children by estab-

* The words—"and in the case of mentally defective children whose age exceeds seven years shall"—now follow on here (see Act of 1914, § 1 (1)).

lishing schools, certified by the Education Department, for epileptic children.

(3) The power conferred by this section shall include power to establish or acquire and to maintain certified schools, and to contribute, on such terms and to such extent as may be approved by the Education Department, towards the establishment, enlargement, or alteration, and towards the maintenance of certified schools.

(4) A school authority may in respect of children resident in or whose permanent home is in their district and attending certified special classes or schools in the district of another school authority, contribute to that other authority the proportionate cost of the provision and maintenance of such special classes or schools.

(5) The school authority, acting under this section, shall make provision for the examination from time to time of any child dealt with under this section, in order to ascertain whether such child has attained such a mental and physical condition as to be fit to attend the ordinary classes of public elementary schools; and the school authority shall make provision for such examination in the case of any child whose parent claims such examination of his child, provided that the parent shall not make such claim within less than six months after his child has been examined; and any school authority failing to make such provision as this subsection requires shall be deemed to have acted in contravention of this Act.

3. A school authority may provide guides or conveyances for children who, in the opinion of the school authority, are by reason of any physical or mental defect unable to attend school without guides or conveyances.

4. (1) The duty of a parent under section four of the Elementary Education Act, 1876, to provide elementary instruction for his child shall, in the case of a defective or epileptic child over seven years of age in any place where a certified special class or school is within reach of the child's residence, include the duty to cause the child to attend such a class or school, and a parent shall not be

excused from this duty by reason only that a guide or conveyance for the child is necessary.

(2) In the case of an epileptic child whose age exceeds seven years, the school authority may, if they think fit, apply to a court of summary jurisdiction for an order requiring the child to be sent to a certified school for epileptics, and if any parent fails to comply with the order, he shall be deemed to have failed to perform the duty prescribed by section four of the Elementary Education Act, 1876, and may be proceeded against accordingly.

5. The provisions of section seven of the Elementary Education (Blind and Deaf Children) Act, 1893, respecting the conditions and effect of the grant of certificates to schools for blind or deaf children shall apply, with the necessary modifications, to schools for defective or epileptic children established or proposed to be established under this Act, except that no requirement need be made as to the proportion of the expenses to be defrayed out of private sources.

6. The provisions of section five of the Elementary Education (Blind and Deaf Children) Act, 1893 (relating to the powers and expenses of a school authority under that Act), shall apply, with the necessary modifications, to school authorities acting under this Act:

Provided that a parish in which there is a school board shall be exempt from contributing to the expenses incurred by any district council acting as a school authority under this Act, and where a school authority are an urban district council their expenses as such authority shall be paid out of the fund to be raised in the area for which they are a school authority in the same manner as the fund out of which their general expenses are payable is raised in the urban district.

7. Nothing in any Act of Parliament shall prevent the Education Department from giving aid from the parliamentary grant to a school in respect of education given to defective or epileptic children to such amount and on such conditions as may be directed by or in pursuance of

the minutes of the Education Department in force for the time being.

8. (1) The parent of a defective or epileptic child shall be liable to contribute towards the expenses of the child incurred by a school authority under this Act in like manner and to the like extent as the parent of a blind or deaf child is liable to contribute under section nine of the Elementary Education (Blind and Deaf Children) Act, 1893, and the provisions of that section shall apply accordingly.

(2) The parent of a defective or epileptic child shall not, by reason of any payment made under this Act in respect of the child, be deprived of any franchise, right, or privilege, or be subject to any disability or disqualification.

(3) Payments under this Act shall not be made on condition of a child attending any certified school other than such as may be reasonably selected by the parent, nor refused because the child attends or does not attend any particular certified school.

9. The board of guardians of any poor law union may contribute such of the expenses of providing, enlarging, or maintaining any certified special class or school under this Act as are certified by the Education Department to have been incurred wholly or partly in respect of scholars taught at the class or school who are either resident in a workhouse or in an institution to which they have been sent by the guardians from a workhouse or boarded out by the guardians.

10. Nothing in this Act shall be construed as imposing a duty on a school authority to receive in a special class or school established by them any child—

(a) who is resident in, or whose permanent home in their opinion is in, the district of another school authority ;
or

(b) who is resident in a workhouse, or in any institution to which he has been sent by the guardians, from a workhouse, or boarded out by the guardians,
unless that other school authority or, as the case may be,

the guardians are willing to contribute towards the expenses of the education and maintenance of the child such sum as may be agreed on between the authorities concerned.

11. For the purposes of the Elementary Education Acts, 1870 to 1893, and of this Act, a defective or epileptic boy or girl shall be deemed to be a child until the age of sixteen years, and the period of compulsory education shall, in the case of such a child, extend to sixteen years, and the attendance of such a child at school may be enforced as if it were required by byelaws made under the Elementary Education Acts, 1870 to 1893, and any such child shall not, in accordance with such byelaws, be entitled to total or partial exemption from the obligation to attend school.

12. The provisions regulating religious instruction in certified schools for defective and epileptic children shall be the same as those enacted by section eight of the Elementary Education (Blind and Deaf Children) Act, 1893.

13. Every school authority shall make to the Education Department such returns as the Department may require ; and the Department shall annually lay before both Houses of Parliament a report of their proceedings under this Act during the preceding year, and in that report shall give lists of the schools and classes to which they have granted or refused certificates under this Act during the year, with their reasons for each such refusal.

14. In this Act—

The expression “ school ” includes any institution in which defective or epileptic children are boarded or lodged as well as taught, and any establishment for boarding or lodging children taught in a certified special class or school :

Other expressions have, unless the contrary intention appears, the same meaning as in the Elementary Education (Blind and Deaf Children) Act, 1893.

15. This Act may be cited as the Elementary Education (Defective and Epileptic Children) Act, 1899, and may be cited with the Elementary Education Acts, 1870 to 1893.

ELEMENTARY EDUCATION (DEFECTIVE AND EPILEPTIC CHILDREN) ACT, 1914

1. (1) It shall be the duty of the local education authority for the purposes of the Elementary Education (Defective and Epileptic Children) Act, 1899 (herein called the principal Act), to make suitable provision, either alone or in conjunction with other local education authorities, for the education of children belonging to their area whose age exceeds seven years and who are ascertained to be mentally defective within the meaning of the principal Act, and accordingly after the words " they may " in subsection (1) of section two of the principal Act there shall be inserted the words " and in the case of mentally defective children whose age exceeds seven years shall " :

Provided that the duty of a local education authority under this Act shall not include—

- (i) A duty to make provision for boarding and lodging a mentally defective child unless the Board of Education are satisfied, after considering the report of a duly qualified medical practitioner approved by the Board under section one of the principal Act, and after consultation with the local education authority, that suitable provision for the child's education cannot be made in any other way, and unless the grants payable out of moneys provided by Parliament in respect of a mentally defective child, so boarded and lodged, amount to not less than one-half of the cost of conveying such child to and from any school so provided, and of educating, boarding, and lodging and medically attending and treating that child (including, in the case of a school provided by a local education authority, expenditure out of income by the authority by way of interest on or repayment of capital raised, or by way of rent or other similar payment, for the purposes of the provision of the school) ; or
- (ii) A duty to establish a certified school for boarding and lodging mentally defective children, unless the

Board of Education are satisfied, after considering the reports of such medical practitioners, and after such consultation as aforesaid, that there are not less than forty-five such children belonging to the area for whose education suitable provision cannot be made in any other way.

(2) Subsection (6) of section two of the principal Act and the Elementary Education Amendment Act, 1903, are hereby repealed.

(3) In case of doubt as to whether a child is or is not mentally defective within the meaning of the principal Act, the matter shall be determined by the Board of Education.

2. In the event of a local education authority proving to the satisfaction of the Board of Education that the average attendance of mentally defective children at a certified class or school provided by such authority has, during the previous three years, been less than fifteen, it shall be lawful for such authority to discontinue the maintenance thereof, and thereupon the authority shall make such alternative provision for the mentally defective children belonging to their area as the Board of Education, after consultation with such authority, may approve.

3. (1) A local education authority, before deciding what provision shall be made for the education of a mentally defective child, shall endeavour to ascertain the wishes of the parents of the child and shall, so far as possible, give effect to their wishes.

(2) A local education authority, in the exercise and performance of their powers and duties under the principal Act and this Act, shall have regard to the existing supply of certified schools and classes, and shall, so far as possible, co-operate with other authorities or persons providing or having power to provide certified schools and classes.

4. The council of a non-county borough or urban district having powers and duties under the principal Act and this Act may, at any time after the passing of this Act, by agreement with the council of the county in which the borough or urban district is situate, and with the approval

of the Board of Education, relinquish in favour of that council any of those powers or duties, and in that case the powers or duties of the authority so relinquished shall cease, and the area of the authority shall, as respects those powers or duties, be part of the area of the county council.

5. (1) If a local education authority are satisfied, after consultation with the parent of a mentally defective or epileptic child over seven years of age, that the parent is not making suitable provision for the child's education, they may require the parent of the child to send the child to a certified class or school suitable for the child, and, if he fails without reasonable excuse to do so, may by complaint apply to a Court of summary jurisdiction for an order requiring the child to be sent to a certified class or school suitable for the child and willing to receive him, being either such as the parent may select, or, if he does not select a suitable class or school, then such class or school as the Court thinks expedient, and such an order shall be a sufficient authority for the conveyance of the child to the class or school named in the order :

Provided that no order shall be made requiring the child to be sent to a certified class or school which is not within reach of the child's residence or to a boarding school without the consent in writing of the parent, unless it is proved to the satisfaction of the Court that such consent is unreasonably withheld, or that the parent cannot be found, but consent shall not be deemed to be unreasonably withheld if withheld with the bona fide intention of benefiting the child :

Provided further that if the Court shall refuse to make an order the Court, unless for good cause it shall otherwise order, shall award costs to the parent, and the costs so awarded shall, unless some reason to the contrary appears, include such sum as compensation for the expense, trouble, and loss of time incurred in or incidental to his attendance at the court as to the Court may seem just and reasonable.

(2) The provisions of this section shall be in substitution

for, and not in addition to, the power of a Court of summary jurisdiction, on an attendance order not being complied with, to order the child to be sent to an industrial school under section twelve of the Elementary Education Act, 1876, as applied by the principal Act.

(3) Nothing in this section shall be construed as affecting the power of a parent to withdraw a child from school on proof to the satisfaction of the local education authority that he will make suitable provision for the child's education in some other way.

6. Section one of the principal Act shall be construed and have effect as if the following words were added at the end of subsection (3) of that section :—

“ Such duly qualified medical practitioner shall, if so directed by the local education authority, or, if he is so requested by the parent of the child, before giving a certificate under this section, consult the head teacher of the school, if any, which the child has been attending, or such other person as the local education authority may appoint for the purpose, and a copy of any report made by the head teacher or such other person shall be forwarded to the local education authority.”

7. When a child is discharged from a special school or class on the ground that he is no longer mentally defective the local education authority shall return to the parent of the child any certificate certifying that the child was mentally defective, and such certificate shall not be received in evidence in any legal proceedings without the consent of the child or its parent.

8. (1) For the purposes of the principal Act and this Act a child shall be deemed to belong to the area in which the residence or permanent home of the child is for the time being situate :

Provided that, in the case of a child in a school or boarded out in pursuance of the principal Act or this Act, the local education authority who are making provision for his education shall continue liable to make such provision pending the determination of any question which

may be referred to the Board of Education under this section.

(2) If any question arises as to the area to which a child is to be deemed to belong, that question shall be determined by the Board of Education, and the Board on determining the question may direct such financial adjustments between the local education authorities concerned as they may consider just.

9. (1) This Act may be cited as the Elementary Education (Defective and Epileptic Children) Act, 1914, and shall be construed with the principal Act, and that Act and this Act may be cited together as the Elementary Education (Defective and Epileptic Children) Acts, 1899 to 1914; and the Education Acts, 1870 to 1911, the Education (Choice of Employment) Act, 1910, and this Act may be cited together as the Education Acts, 1870 to 1914.

(2) This Act shall come into operation on the first day of January, nineteen hundred and fifteen.

MEMORANDUM RELATING TO REGULATIONS
UNDER SECTION 2 (2) OF THE MENTAL DEFICIENCY ACT, 1913, AND REVISED MODEL
ARRANGEMENTS UNDER SECTION 1 (1) OF THE
ELEMENTARY EDUCATION (DEFECTIVE AND
EPILEPTIC CHILDREN) ACT, 1899, AND SEC-
TION 31 (1) OF THE MENTAL DEFICIENCY ACT,
1913

[CIRCULAR 865]

1. I am directed to refer to the Mental Deficiency (Notification of Children) Regulations, 1914, a copy of which was recently sent to the Authority. These Regulations take the place of the Provisional Regulations of the 24th March, 1914, a copy of which was forwarded to the Authority on the 30th March. It will be observed that Article 7 of the Provisional Regulations has been redrafted and that paragraphs dealing with the reference to the Board of doubtful cases have been inserted in Articles 2, 3 and 4. The last

paragraphs of Articles 2, 3 and 4 have also been expanded with a view to explaining more clearly the procedure contemplated and a new Article 9 has been inserted. These alterations have been made by the Board after consideration of representations and suggestions which have been made to them.

2. I am also directed to forward to the Authority a copy of the revised Model Arrangements which have been framed by the Board for the guidance of Local Education Authorities in carrying out the duties imposed upon them by Section 31 (1) of the Mental Deficiency Act. Section 5 of the Model Arrangements has been altered so as to correspond with Section 6 of the Elementary Education (Defective and Epileptic Children) Act, 1914, which will come into operation on the 1st January, 1915. Sections 6, 7, 10, 13 and 14 have been modified in order to correspond with the revised Regulations now issued, and Section 15 has been added in view of the addition of the new Article 9 of the Regulations. The other Sections remain unaltered. I am to request that the Authority will inform the Board whether they propose to adopt these Model Arrangements. If the Authority have already notified the Board of their intention to adopt the Model Arrangements issued on the 30th March, it is assumed that they will desire to adopt the slightly modified Arrangements now issued, and the Board will be glad to receive a notification to this effect.

3. As some misunderstanding has arisen with regard to the intention of paragraph 8 of Circular 829, I am to explain that the Board did not contemplate that reports on individual children should be forwarded by the Local Education Authority to the Local Control Authority except in those cases where a duty of formal notification is placed upon the Local Education Authority. Any information supplied as to other cases would, as stated in the paragraph in question, be supplied mainly for statistical purposes, and it was intended to suggest that it should take the form of a numerical report and that the names of individual children should not be communicated.

MENTAL DEFICIENCY (NOTIFICATION OF CHILDREN) REGULATIONS, 1914

THE Board of Education, by virtue and in pursuance of the powers in them vested under the Mental Deficiency Act, 1913, and of every other power enabling them in this behalf, do order, and it is hereby ordered, that the following Regulations be observed:—

1. The School Medical Officer of the Local Education Authority and such other duly qualified medical practitioners approved by the Board of Education under the Elementary Education (Defective and Epileptic Children) Act, 1899, as the Local Education Authority may nominate for that purpose, hereinafter called Certifying Officers, shall be the Medical Officers for the purpose of these Regulations.

2. (1) If the Certifying Officer certifies that a child of the age of seven years or upwards is incapable, by reason of mental defect, of receiving benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, the Local Education Authority shall notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913, and shall furnish that Authority with a copy of the certificate of the Certifying Officer, which shall be in the prescribed form, and of his report on the child.

(2) In any case where, upon consideration of the certificate of the Certifying Officer and of any report which may be obtained by the Local Education Authority as hereinafter provided, the Local Education Authority are in doubt whether a child is or is not capable of receiving such benefit as aforesaid, they shall refer to the Board of Education for determination the question whether the name should be notified.

(3) In any case where it is proposed to notify under this Article of these Regulations the name of a child who is not an idiot or an imbecile, the Local Education Authority shall furnish the Board of Education with a copy of the

report of the Certifying Officer on the child, and if, after consideration of the report, the Board so require, shall refer to the Board for determination the question whether the name should be notified.

3. (1) If the Certifying Officer certifies that a child of the age of seven years or upwards who is, or has been, in attendance at a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, is incapable of receiving further benefit from instruction in such a school or class, the Local Education Authority shall notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913, and shall furnish that Authority with a copy of the certificate of the Certifying Officer, which shall be in the prescribed form, and of his report on the child.

(2) In any case where, upon consideration of the certificate of the Certifying Officer and of any report which may be obtained by the Local Education Authority as hereinafter provided, the Local Education Authority are in doubt whether a child is or is not capable of receiving such further benefit as aforesaid, they shall refer to the Board of Education for determination the question whether the name should be notified.

(3) In any case where it is proposed to notify under this Article of these Regulations the name of a child who is not an idiot or an imbecile, the Local Education Authority shall furnish the Board of Education with a copy of the report of the Certifying Officer on the child and if, after consideration of the report, the Board so require, shall refer to the Board for determination the question whether the name should be notified.

4. (1) If the Certifying Officer certifies that a child of the age of seven years or upwards cannot be instructed in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, without detriment to the interests of the other children, the Local Education Authority shall notify the name and address of the child to the Local Authority under the Mental Deficiency

Act, 1913, and shall furnish that Authority with a copy of the certificate of the Certifying Officer, which shall be in the prescribed form, and of his report on the child.

(2) In any case where, upon consideration of the certificate of the Certifying Officer and of any report which may be obtained by the Local Education Authority as hereinafter provided, the Local Education Authority are in doubt whether the retention of a child in a special school or class would be detrimental to the interests of the other children, they shall refer to the Board of Education for determination the question whether the name should be notified.

(3) In any case where it is proposed to notify under this Article of these Regulations the name of a child who is not a moral imbecile, the Local Education Authority shall furnish the Board of Education with a copy of the report of the Certifying Officer on the child, and if, after consideration of the report, the Board so require, shall refer to the Board for determination the question whether the name should be notified.

5. If the Local Education Authority are satisfied upon any representation made to them or otherwise that it is desirable that a mentally defective child of the age of seven years or upwards who is certified to be capable of receiving benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, should be dealt with by way of supervision or guardianship under the Mental Deficiency Act, 1913, they shall notify the case to the Board of Education, together with such particulars as the Board of Education may require, and if the Board certify that there are special circumstances which render it desirable that the child should be dealt with under the Mental Deficiency Act, 1913, by way of supervision or guardianship, the Local Education Authority shall notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913.

6. The Local Education Authority shall notify to the Local Authority under the Mental Deficiency Act, 1913, the name and address of any mentally defective child who,

on or before attaining the age of sixteen, is about to be withdrawn or discharged from a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, and in whose case the Local Education Authority are of opinion that it would be to his benefit that he should be sent to an institution or placed under guardianship under the Mental Deficiency Act, 1913.

7. For the purpose of these Regulations the Local Education Authority may ask for a report from any teacher of the school, if any, which the child has been attending, or from any other person, and if on consideration of such report or reports or of the report of the Certifying Officer the Local Education Authority are in doubt as to the action to be taken, they shall refer the case to the Board of Education for determination.

8. In any case where a Local Education Authority propose to notify to the Local Authority under the Mental Deficiency Act, 1913, the name of a child who is blind or deaf within the meaning of Section 15 (1) of the Elementary Education (Blind and Deaf Children) Act, 1893, the Local Education Authority shall furnish the Board of Education with a copy of the report of the Certifying Officer on the child and, in the case of a child already in attendance at a special school for blind or deaf children, with a report by the Head Teacher of the school on the child's progress while in the school, and if, after consideration of the report or reports, the Board so require, shall refer to the Board for determination the question whether the name of the child should be notified.

9. The Local Education Authority shall inform the parent of any child affected by these Regulations of any action proposed to be taken with reference to that child under these Regulations.

10. (1) In these Regulations the expression "prescribed" means prescribed in the arrangements made by the Local Education Authority under Section 1 of the Elementary Education (Defective and Epileptic Children) Act, 1899, and Section 31 (1) of the Mental Deficiency Act, 1913.

MEMORANDUM RELATING TO REGULATIONS
UNDER SECTION 2 (2) OF THE MENTAL DE-
FICIENCY ACT, 1913, AND MODEL ARRANGE-
MENTS UNDER SECTION 1 (1) OF THE ELE-
MENTARY EDUCATION (DEFECTIVE AND EPI-
LEPTIC CHILDREN) ACT, 1899, AND SECTION
31 (1) OF THE MENTAL DEFICIENCY ACT, 1913

[CIRCULAR 829]

1. I am directed to enclose for the information of the Local Education Authority copies of the *Provisional Regulations* made by the Board of Education under Section 2 (2) of the Mental Deficiency Act, 1913, and of the *Model Arrangements* which have been framed by the Board for the guidance of Local Education Authorities in carrying out the duties imposed upon them by Section 31 (1) of that Act. The Regulations and Arrangements have been drawn up by the Board in consultation with the Board of Control constituted as the Central Authority under the Act, who are in general agreement with the provisions of both documents and of this circular.

2. Section 31 (1) of the Mental Deficiency Act lays upon Local Education Authorities the duty of making arrangements, subject to the approval of the Board of Education, for ascertaining what children within their area are defective within the meaning of the Act, and which of such children are incapable by reason of mental defect of profiting by instruction in Special Schools, and for notifying to the Local Authority under the Act, referred to hereafter as the Local Control Authority, all children who fall within certain specified classes as defined by Section 2 (2) of the Act. The duty of notifying certain defective children to the Local Control Authority is also imposed by Section 2 (2) of the Act, which requires that such notification shall be in accordance with Regulations made by the Board of Education. Consequently the Regulations refer to notification only, while the Model Arrangements refer both to ascertainment and to notification. Moreover, under

Section 68 of the Act the Regulations have effect as if enacted in the Act, and are consequently binding upon all Local Education Authorities, while the Model Arrangements are intended for the guidance of Authorities, though it will be clear that nothing in that part of the Arrangements which refers to the notification of children to the Local Control Authority must be inconsistent with the Regulations made by the Board under Section 2 (2) of the Act.

3. As regards Articles 2 and 3 of the Regulations and Sections 6 and 10 of the Model Arrangements, I am to explain that the Board of Education are of opinion that, speaking generally, children who are rightly classified as idiots or imbeciles are ineducable, while children rightly classified as feeble-minded are educable to a greater or less degree. They recognise that there may be occasional cases of low grade feeble-minded children who, though not idiots or imbeciles, are practically incapable of profiting by instruction in a Special School, and that such cases may properly be notified to the Local Control Authority, but they consider that such children should first be given an adequate trial under suitable educational conditions in a Special School, preferably a Residential School, in order that it may be ascertained by actual experience whether they are in fact incapable of profiting by instruction in such a School.

The procedure contemplated in these cases, and also in those referred to in the second paragraph of Article 4 and in Article 8 of the Regulations, is that a copy of the report of the Certifying Officer should be sent to the Board, and that the case should not be notified to the Local Control Authority until a reply is received from the Board. The Board will consider the report of the Certifying Officer, and unless its contents give some *prima facie* reason for thinking that the classification of the child is erroneous they will as soon as possible inform the Local Education Authority that they have no observations to offer in regard to the proposed notification of the case to the Local

Control Authority. Where, however, it appears to the Board to be possible that the child has been incorrectly classified they may ask for further information and, if they think proper, require the matter to be formally submitted to them for determination.

It will be observed that the obligation on the Authority to forward the report to the Board before notifying the name to the Local Control Authority arises only in certain exceptional cases, and the Board anticipate that the number of such cases will be found in practice to be comparatively small. For example the great majority of children who are notified to the Local Control Authority under Article 2 of the Regulations will be children who have been reported to be idiots or imbeciles, and it is only in exceptional cases that it will be proposed to notify under that Article children who have not been so reported. The Board have no desire to interfere unduly with the discretion of Local Education Authorities in this matter, but with a view to securing a reasonable standard of uniformity among Authorities they have thought it expedient to obtain information as to all cases falling within certain exceptional classes before they are notified to the Local Control Authority.

4. With regard to Article 4 of the Regulations and Section 7 of the Model Arrangements, the Board consider it important that, as a general rule, no educable feeble-minded child should be notified to the Local Control Authority as incapable of being instructed in a Special School without detriment to the interests of the other children, unless it has been clearly shown by actual observation in a Special School for an adequate length of time that the presence of the child is a source of serious moral danger to the other children. The Board would not, for example, regard as falling within this class children who, by reason of the severe character of their mental defect, interfere to some extent with the educational progress of the other children, as they take the view that any difficulties arising from the presence of such children in the

School should be met by improved classification and increased individual attention. Nor would the Board, unless the circumstances were exceptional, regard as falling within this class educable feeble-minded children who are objectionable on account of uncleanly habits, as experience has shown that children of this type can frequently be trained by individual care and attention in a Special School to such an extent that their presence ceases to be objectionable. In certain circumstances such training may be more successfully carried out when the child is in attendance at a Residential School.

The Board are, in fact, of opinion that children who are incapable of being instructed in a Special School without detriment to the interests of the other children are in practice found, in nearly all cases, to be moral imbeciles as defined by Section 1 (*d*) of the Mental Deficiency Act, and, further, that there are very few, if any, children who are moral imbeciles within the meaning of that definition who could be instructed in a Special School without detriment to the interests of the other children. In this connection I am to point out that the term "moral imbecile" cannot be applied to children who possess comparatively slight criminal tendencies, such as a tendency to petty pilfering, since, under Section 1 (*d*) of the Act, a "moral imbecile" is a person who, from an early age, displays some permanent mental defect coupled with strong vicious or criminal propensities on which punishment has had little or no deterrent effect.

5. The provisions of Article 5 of the Regulations and Section 11 of the Model Arrangements enable a Local Education Authority, with the approval of the Board of Education, to bring to the notice of the Local Control Authority cases of educable feeble-minded children who, in their opinion, should be placed under supervision or guardianship owing to unfavourable home conditions or for some similar reason. In order, however, that the education of such children may be continued, it is very desirable that arrangements should be made for the

children to continue in attendance at a Day Special School and thus to remain under the control of the Local Education Authority as regards their education, while they would be within the sphere of the Local Control Authority as regards their supervision or guardianship out of school hours.

6. With reference to Article 6 of the Regulations and Section 12 of the Model Arrangements, it may be pointed out that under Section 11 of the Elementary Education (Defective and Epileptic Children) Act, 1899, the parents of mentally defective children are under an obligation (where a Special School is available) to cause them to attend school until the age of sixteen. Consequently the necessity of notifying a child to the Local Control Authority under Article 6 of the Regulations will, as a rule, arise only in the case of children who have attained, or will shortly attain, the age of sixteen, and in whose case the Local Education Authority are of opinion that it would be to their benefit that they should be sent to an institution or placed under guardianship.

7. With regard to Article 8 of the Regulations and Section 14 of the Model Arrangements, I am to explain that these provisions have been included in view of the possibility that a child may be certified as ineducable whose apparent ineducability is due to its blindness or deafness and who would be found to be educable if trained by suitable methods in a School for blind or deaf children. In view of the risk of incorrect certification where the Certifying Officer has not had special experience in dealing with children who are blind or deaf, it is important that any such cases should be investigated with special care, and that, where necessary, an expert medical opinion should be obtained.

8. The Board of Education understand that the Board of Control consider it important that the Local Control Authority should be in possession of as complete and accurate information as possible with regard to cases of mental deficiency in their area. It would be convenient,

therefore, if Local Education Authorities, in addition to notifying such cases as fall within the scope of the Regulations, would furnish the Local Control Authority with information as to other children in their area, whether over or under seven years of age, who are, or appear to be, mentally defective within the meaning of the Mental Deficiency Act, 1913. Such information would be supplied mainly for statistical purposes and it would, of course, be necessary that reports thus furnished should be clearly distinguished from formal notifications under Section 2 (2) of the Act. In this connection reference may be made to Table III of Appendix J of the Annual Report for 1912 of the Board's Chief Medical Officer, which suggests a form in which School Medical Officers may present a numerical return of all exceptional children in their area, including mentally defective children.

9. In the Appendix to the Model Arrangements the Authority will find the forms of certificate and report referred to in the Regulations and in the Arrangements. It will be understood that, with a view to securing the necessary uniformity, all certificates should be given in the form there prescribed. Copies of all the schedules will be supplied by the Board for the use of Authorities on application.

With regard to Schedule F, it will be observed that the suggested Form of Report is substantially the same as the schedule printed in Appendix E of the Annual Report for 1911 of the Board's Chief Medical Officer. The Board realise that much remains doubtful and unknown in respect of feeble-mindedness, but it has been deemed advisable to suggest, tentatively, a form for recording the results of inquiry which has been found to be of practical value. It is obvious that the filling up of this Schedule will involve some care and trouble to the Certifying Officer, but it should be borne in mind that in the interests of the child a detailed and careful examination should be made, and a complete record of such examination is essential. Such a record will be particularly desirable in the case of those

children whom it is proposed to notify to the Local Control Authority, as the report will furnish a basis for the " dossier " which will be kept by that Authority for each child brought to their notice. A detailed record of the examination will also be required for those cases which are referred to the Board under the Regulations.

It may be added that Schedule F was arrived at after careful consideration and with the assistance of expert advice and the Board trust that it will be found to supply useful guidance to Medical Officers who are entrusted with the duty of carrying out these examinations of defective children, especially those who have not hitherto had special experience in such work, and that certifying officers generally will co-operate in securing that the examinations and the records of them should be as complete and detailed as possible. Whilst it would have been possible to issue a shorter form with added notes, it was considered that on the whole the form here adopted would prove in the long run the most convenient. It will, of course, be understood that the various items of the Schedule are not of equal diagnostic value or importance, and that many feeble-minded children do not manifest all the signs and symptoms at present believed to be characteristic of the disease or even all those most commonly found.

10. While the responsibility for deciding in which category a child should be placed must rest with the Certifying Medical Officer, it is desirable that he should take advantage as far as possible of the knowledge and experience possessed by the teachers, whether in Special Schools or in the ordinary Elementary Schools. When a child already in attendance at a Special School or Public Elementary School is to be examined, the opinion of the Head Teacher of the School will clearly be of value in determining the degree of mental defect, while even in the case of children who have not hitherto attended any school the Certifying Officer may find it advantageous to associate with himself in the work of examination a teacher who has had special experience in dealing with mentally defective children.

11. The Board also wish to direct the attention of Local Education Authorities to the desirability of close co-operation with the parents of mentally defective children in all matters relating to the education of their children or their notification to the Local Control Authority. In the opinion of the Board it is important that parents should be given ample opportunities of making representations in regard to these matters, and that every endeavour should be made to meet the legitimate views of parents as to the course which is most consistent with the welfare of their children, and to keep them informed of their progress. It may be anticipated that the information furnished by the parents will often prove of value in enabling an accurate diagnosis of the case to be made.

12. As the Mental Deficiency Act comes into operation on the 1st April, 1914, it is desirable that Local Education Authorities should at once proceed to frame arrangements for carrying out their duties under Section 31 (1) of the Act, and I am accordingly to request that the Authority will inform the Board at an early date whether they propose to adopt the Model Arrangements drawn up by the Board.

MODEL ARRANGEMENTS UNDER SECTION 1 (1) OF
THE ELEMENTARY EDUCATION (DEFECTIVE
AND EPILEPTIC CHILDREN) ACT, 1899, AND
SECTION 31 (1) OF THE MENTAL DEFICIENCY
ACT, 1913

1. The School Medical Officer of the Local Education Authority and such other duly qualified medical practitioners approved by the Board of Education under the Elementary Education (Defective and Epileptic Children) Act, 1899, as the Local Education Authority may nominate for that purpose, hereinafter called Certifying Officers, shall be the Medical Officers for the purpose of the Elementary Education (Defective and Epileptic Children) Act, 1899, and of the Regulations made by the Board of Educa-

tion under the Mental Deficiency Act, 1913, and for the purpose of these Arrangements.

2. The Head Teacher of every Public Elementary School shall bring to the notice of the Local Education Authority any children attending the School who appear, by reason of mental defect, to be incapable of receiving proper benefit from the instruction in an ordinary Public Elementary School, and the Medical Officers of the Authority shall report to the Authority the names and addresses of all children discovered by them in the course of their work in connection with the School Medical Service to be defective within the meaning of the Mental Deficiency Act, 1913.

3. The officers of the Local Education Authority who are charged with the duty of enforcing the law of school attendance shall report to the Local Education Authority the names and addresses of all children not in attendance at school who appear, or are reputed to be, defective within the meaning of the Mental Deficiency Act, 1913.

4. The Local Education Authority will make arrangements for the examination by a Certifying Officer appointed for the purpose of these Arrangements of any child whose name has been so reported, and will also make arrangements for enabling any parent who is of opinion that his child ought to be dealt with under the Elementary Education (Defective and Epileptic Children) Act, 1899, to present such child to a Certifying Officer for examination. The child shall be examined within three months of his attaining the age of seven years, and at such other times as appear to the Local Education Authority to be desirable.

5. (1) The Certifying Officer, after he has examined the child, shall furnish the Local Education Authority with a certificate in one of the forms prescribed in the Schedules to these Arrangements, and with a full report on the child on the lines suggested in Schedule F.

(2) Before giving a certificate the Certifying Officer shall, if so directed by the Local Education Authority, or if he is so requested by the parent of the child, consult the

Head Teacher of the School, if any, which the child has been attending, or such other person as the Local Education Authority may appoint for the purpose, and a copy of any report made by the Head Teacher or such other person shall be forwarded to the Local Education Authority.

6. (1) If the Certifying Officer certifies that a child of the age of seven years or upwards is incapable,* by reason of mental defect, of receiving benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, the Local Education Authority will notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913, and will furnish that Authority with a copy of the certificate of the Certifying Officer, which shall be in the form prescribed in Schedule C of these Arrangements, and with a copy of his report on the child.

(2) In any case where upon consideration of the certificate of the Certifying Officer and of any report which may be obtained by the Local Education Authority as herein provided, the Local Education Authority are in doubt whether a child is or is not capable of receiving such benefit as aforesaid, they will refer to the Board of Education for determination the question whether the name should be notified.

(3) In any case where it is proposed to notify under this Section of these Arrangements the name of a child who is not an idiot or an imbecile, the Local Education Authority will furnish the Board of Education with a copy of the report of the Certifying Officer on the child, and if, after consideration of the report, the Board so require, will refer to the Board for determination the question whether the name should be notified.

7. (1) If the Certifying Officer certifies that a child of the age of seven years or upwards cannot be instructed in a special school or class under the Elementary Educa-

* Under the Elementary Education (Defective and Epileptic Children) Act, 1899, idiots and imbeciles are excluded from special schools and classes certified for the purpose of that Act.

tion (Defective and Epileptic Children) Act, 1899, without detriment to the interests of the other children, the Local Education Authority will notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913, and will furnish that Authority with a copy of the certificate of the Certifying Officer, which shall be in the form prescribed in Schedule E of these Arrangements, and with a copy of his report on the child.

(2) In any case where upon consideration of the certificate of the Certifying Officer and of any report which may be obtained by the Local Education Authority as herein provided, the Local Education Authority are in doubt whether the retention of a child in a special school or class would be detrimental to the interests of the other children, they will refer to the Board of Education for determination the question whether the name should be notified.

(3) In any case where it is proposed to notify under this Section of these Arrangements the name of a child who is not a moral imbecile, the Local Education Authority will furnish the Board of Education with a copy of the report of the Certifying Officer on the child, and if, after consideration of the report, the Board so require, will refer to the Board for determination the question whether the name should be notified.

8. The Local Education Authority will arrange for the examination from time to time by a Certifying Officer appointed for the purpose of these Arrangements of all mentally defective children who are being educated in special schools or classes maintained by them under the Elementary Education (Defective and Epileptic Children) Act, 1899, with a view to ascertaining in each case (1) whether the child can be discharged from the special school or class on the ground that he has attained such a mental condition to be fit to attend the ordinary classes of Public Elementary Schools, (2) whether he is incapable of receiving further benefit from instruction in a special school or class, or (3) whether he cannot be instructed in a special school or class without detriment to the interests of the other

children. Such examination shall be made at intervals of not more than twelve months, provided that if a parent of any child claims that his child shall be examined and the child has not been examined within six months before the date of such claim a special examination of the child shall be made on the request of the parent.

9. The Local Education Authority will also make provision for ascertaining in the case of any mentally defective child sent by them to a special school or class not maintained by a Local Education Authority, or to a special school or class maintained by another Local Education Authority, (1) whether the child can be discharged from the special school or class on the ground that he has attained such a mental condition as to be fit to attend the ordinary classes of Public Elementary Schools, (2) whether he is incapable of receiving further benefit from instruction in a special school or class, or (3) whether he cannot be instructed in a special school or class without detriment to the interests of the other children. For this purpose the Local Education Authority sending the child will arrange for reports on the child to be forwarded to them at intervals of not more than twelve months. These reports shall be made by a Certifying Officer, and for this purpose the Local Education Authority may approve the Medical Officer of the school or class at which the children are being educated as Certifying Officer in respect of those children.

10. (1) If the Certifying Officer certifies that a child of the age of seven years or upwards is incapable of receiving further benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, the Local Education Authority will notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913, and will furnish that Authority with a copy of the certificate of the Certifying Officer, which shall be in the form prescribed in Schedule D of these Arrangements, and with a copy of his report on the child.

(2) In any case where upon consideration of the certificate of the Certifying Officer and of any report which may be obtained by the Local Education Authority as herein provided, the Local Education Authority are in doubt whether a child is or is not capable of receiving such further benefit as aforesaid, they will refer to the Board of Education for determination the question whether the name should be notified.

(3) In any case where it is proposed to notify under this Section of these Arrangements the name of a child who is not an idiot or an imbecile, the Local Education Authority will furnish the Board of Education with a copy of the report of the Certifying Officer on the child, and if, after consideration of the report, the Board so require, will refer to the Board for determination the question whether the name should be notified.

11. If the Local Education Authority are satisfied upon any representation made to them or otherwise that it is desirable that a mentally defective child of the age of seven years or upwards who is certified to be capable of receiving benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, should be dealt with by way of supervision or guardianship under the Mental Deficiency Act, 1913, they will notify the case to the Board of Education, together with such particulars as the Board of Education may require, and if the Board certify that there are special circumstances which render it desirable that the child should be dealt with under the Mental Deficiency Act, 1913, by way of supervision or guardianship, the Local Education Authority will notify the name and address of the child to the Local Authority under the Mental Deficiency Act, 1913.

12. The Local Education Authority will notify to the Local Authority under the Mental Deficiency Act, 1913, the name and address of any mentally defective child who, on or before attaining the age of sixteen, is about to be withdrawn or discharged from a special school or class under

the Elementary Education (Defective and Epileptic Children) Act, 1899, and in whose case the Local Education Authority are of opinion that it would be to his benefit that he should be sent to an institution or placed under guardianship under the Mental Deficiency Act, 1913.

13. For the purpose of these Arrangements the Local Education Authority may ask for a report from any teacher of the school, if any, which the child has been attending, or from any other person, and if, on consideration of such report or reports or of the report of the Certifying Officer, the Local Education Authority are in doubt as to the action to be taken, they will refer the case to the Board of Education for determination.

14. In any case where a Local Education Authority propose to notify to the Local Authority under the Mental Deficiency Act, 1913, the name of a child who is blind or deaf within the meaning of Section 15 (1) of the Elementary Education (Blind and Deaf Children) Act, 1893, the Local Education Authority will furnish the Board of Education with a copy of the report of the Certifying Officer on the child and, in the case of a child already in attendance at a special school for blind or deaf children, with a report by the Head Teacher of the school on the child's progress while in the school, and if, after consideration of the report or reports, the Board so require, will refer to the Board for determination the question whether the name of the child should be notified.

15. The Local Education Authority will inform the parent of any child affected by these Arrangements of any action proposed to be taken with reference to that child under these Arrangements.

APPENDIX

SCHEDULE A

School (if any).

Local Education Authority.

Name of Child (in full).

Date of Birth.

I certify that this child is not incapable, by reason of mental defect, of receiving benefit from the instruction in an ordinary Public Elementary School.

SCHEDULE B

School (if any).

Local Education Authority.

Name of Child (in full).

Date of Birth.

I certify that this child, not being merely dull or backward and not being an idiot, an imbecile, or a moral imbecile, is feeble-minded within the meaning of the Mental Deficiency Act, 1913, but is not incapable by reason of mental defect of receiving benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899.

SCHEDULE C

School (if any).

Local Education Authority.

Name of Child (in full).

Date of Birth.

I certify that this child is incapable, by reason of mental defect, of receiving benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899.

NOTE.—Under the Elementary Education (Defective and Epileptic Children) Act, 1899, idiots and imbeciles are excluded from special schools and classes certified under that Act.

SCHEDULE D

School (if any).

Local Education Authority.

Name of Child (in full).

Date of Birth.

I certify that this child is incapable, by reason of mental defect, of receiving further benefit from instruction in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899.

SCHEDULE E

School (if any).

Local Education Authority.

Name of Child (in full).

Date of Birth.

I certify that this child cannot be instructed in a special school or class under the Elementary Education (Defective and Epileptic Children) Act, 1899, without detriment to the interests of the other children.

SCHEDULE F

SUGGESTED FORM OF REPORT ON CHILD EXAMINED FOR
MENTAL DEFICIENCY

I. Name of Child (in full).

Address.

Date of Birth.

School (if any).

Local Education Authority.

II. Particulars of Home Conditions, Environment, School Attendance, and other Factors.

III. Family History (in regard to history of mental defect, epilepsy, alcoholism, etc.)

IV. Personal History :—

(a) *Constitutional Defects, Injury at Birth, Malnutrition, Rickets, Congenital Syphilis, etc.*

(b) *Diseases of Childhood.*

(c) *Commencement of Teething.*

(d) *Walking.*

(e) *Speech.*

V. *Physical Conditions* :—(a) *General (results of routine medical inspection).*(b) *Special* :—(1) *Speech* : Defective articulation.(2) *Sight* : Blindness, total or partial, errors of refraction.(3) *Hearing* : Deaf-mutism, partial deafness, partial mutism.(4) *Nose and throat* : Enlarged tonsils, adenoids, mouth breathing.(5) *Control of spinal reflexes and of salivation.*(c) *Stigmata* :—(1) *General retardation*—Cretinoid development.(2) *Cranium*—Microcephaly, hydrocephaly, asymmetry, rickets, imperfect closure of fontanelles, simple head measurement.(3) *Hair*—Double and treble vortices, wiry or supple.(4) *Face*—Irregularity of features.(5) *Lower jaw*—Protruding or receding.(6) *Eyes*—Mongoloid, presence of epicanthic fold.(7) *Ears*—Size, setting, conformation, lateral symmetry, size of lobes, attachment of lobe to the cheek, supernumerary lobules.(8) *Tongue*—Enlarged, furrowed, papillæ enlarged.(9) *Teeth*—Irregular, absent, enlarged incisors.(10) *Palate*—Arched, narrow.(11) *Fingers*—Webbed, clubbed, defective in number or shape, supernumerary digits.(12) *Limbs*—Excessive length of upper limbs.VI. *Mental Conditions* :—

[N.B.—In assessing mental conditions, the tests designed by Binet and Simon are recommended.]

(a) *Reactions of Motor Mechanism* :—(1) *Formation of Motor Ideas.* (Execution of simple movements from imitation).(2) *Storage of Motor Ideas.* (Execution of simple familiar command by word of mouth).

- (3) *Power of control, initiative, purpose, and concentration. Success of motor output, (Execution of familiar complex movement.)*
- (4) *Motor Incompetence. Attitude in standing-position of head, spine, knees. Gait. Position of arms, hands, fingers, in horizontal extension. General balance.*
- (5) *Motor Instability. (Habits.) Rocking of body, rubbing hands, spitting, biting nails, or licking lips.*
- (6) *Motor Disturbance. Tremors (face, hand, tongue), Chorea, Epilepsy, Aphasia, Hemiplegia.*
- (b) *Reactions resulting from Sensory Stimulation :—*
 - (1) *Attention—colour, shape, size, smell.*
 - (2) *Formation of Memory Images :*
 - (a) *Recognition : objects, sounds.*
 - (b) *Recollection.*
 - (3) *Association of Ideas.*
 - (4) *Judgment (for example—length, size, distance).*
 - (5) *Relationship (similarity, contrast, symbolism).*
 - (6) *General concepts (possession, self-protection, purpose, concentration, initiative).*
- (c) *Emotional Conditions :—*

Interest, excitement, aggression, co-operation, affection, etc. (positive or negative phases).
- (d) *Tests of Intelligence :—*
 - (1) *Description of pictures, models, objects, familiar events.*
 - (2) *Letters, words, reading (word blindness).*
 - (3) *Counting, manipulation of simple numbers, simple money values.*
 - (4) *Writing.*
 - (5) *Manual Tests.*
- (e) *Will Power as tested under the above headings.*
- (f) *Moral characteristics not recorded in (a)–(e).*

VII. Diagnosis :—

- (a) *Physically defective—stating defect.*
- (b) *Blind or partially blind.*

- (c) *Deaf-mute or semi-mute or semi-deaf.*
- (d) *Epileptic.*
- (e) *Merely dull or backward.*
- (f) *Mentally defective (feeble-minded).*
- (g) *Imbecile.*
- (h) *Moral Imbecile.*
- (i) *Idiot.*

[In this group the symbols "a" to "i" are intended to be correlated when necessary.]

VIII. Treatment recommended :—

- (With any necessary notes as to after-care, custody, and the degree and character of manual training and ordinary school teaching likely to be advisable.)
- (1) *An ordinary public elementary school.*
(With or without particular supervision or modification of curriculum.)
- (2) *A special class for dull or backward children.*
- (3) *A special school (state whether day or residential is recommended).*
- (4) *Unsuitable for a Special school :—*

Signature of the Medical Officer.

Date.

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